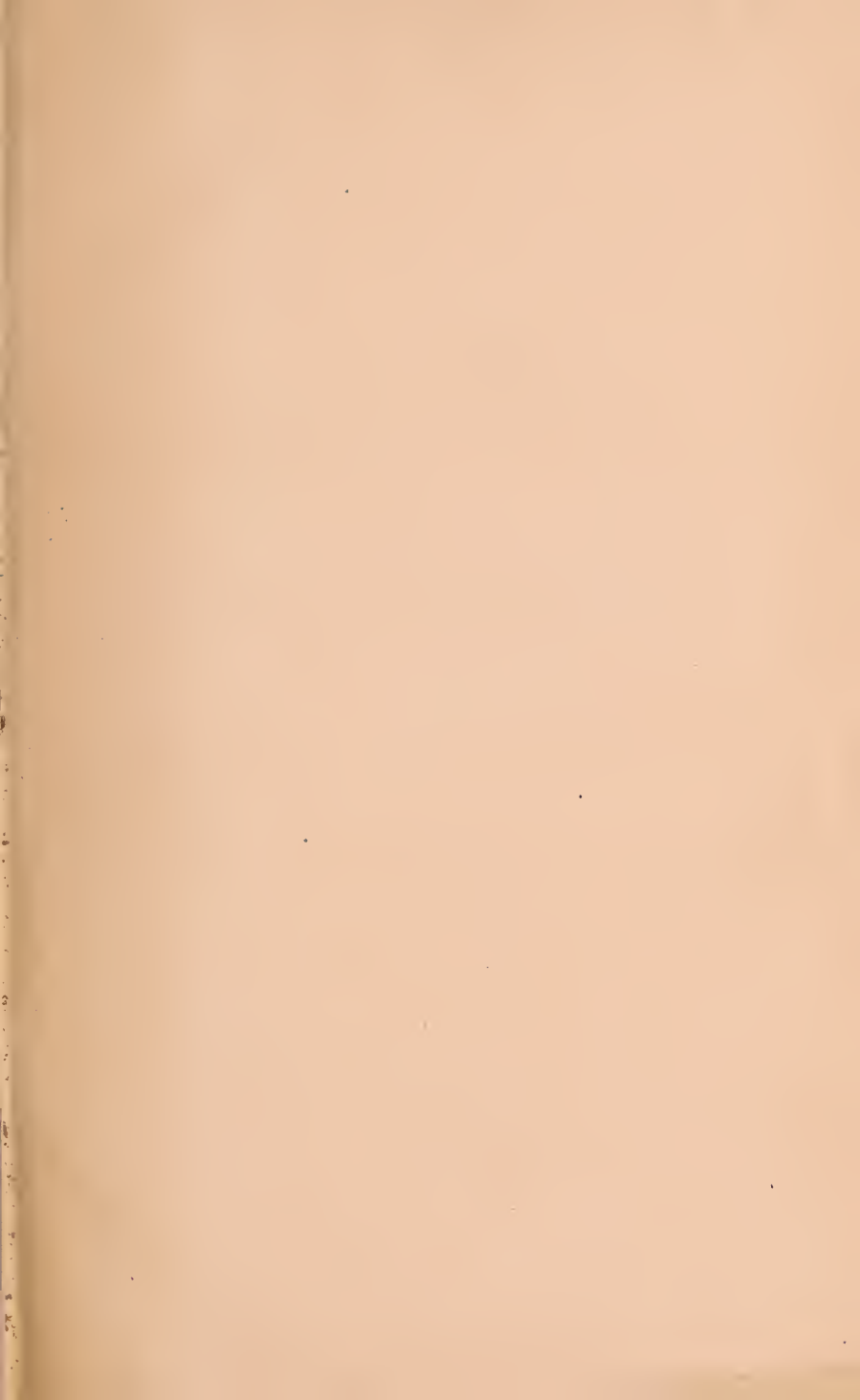


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Journal of the Asiatic
Society of Bengal



JOURNAL
OF THE
ASIATIC SOCIETY OF BENGAL,

EDITED BY
THE SECRETARIES.

VOL. XVI.

PART I.—JANUARY TO JUNE, 1847.

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“It will flourish, if naturalists, chemists, antiquaries, philologers, and men of science, in different parts of Asia will commit their observations to writing, and send them to the Asiatic Society at Calcutta. It will languish if such communications shall be long intermitted; and it will die away if they shall entirely cease.”—SIR WM. JONES.

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CALCUTTA :

PRINTED BY J. THOMAS, BAPTIST MISSION PRESS.

1847.



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INDEX TO VOL. XVI.

PART I.

	<i>Page</i>
Atmospheric Dust from Shanghai, Examination of some, forwarded to the Asiatic Society of Bengal, by D. L. Macgowan, Esq. M. D., Ningpo Hospital. By H. Piddington, Curator Museum Economic Geology,.....	193
Account of the process employed for obtaining Gold from the Sand of the River Beyass; with a short account of the Gold Mines of Siberia. By Capt. J. Abbott, Boundary Commissioner, &c.....	226
Archæology of India, Queries on the. By Rev. James Long,.....	285
Bhâsha Parichêda, or Division of Language, A logical Treatise, translated from the Sunscrit. By Dr. E. Roer,	157
Correct Facsimiles of Inscriptions, Instructions how to take. By Capt. M. Kittoe, 6th N. I.	366
Coal, being Volcanic Coal, On a new kind of, from Arracan. By H. Piddington, Curator Museum of Economic Geology,	371
Caves of Burabur, Notes on the. By Capt. M. Kittoe, 6th N. I.	401
Damascus Blade of Goojrat, Process of Working the. By Capt. James Abbott, Boundary Commissioner, Lahore,	417
Easiest method of taking and preparing Drawings for Lithograph, Hints on the. By Capt. M. Kittoe, 6th N. I.	368
Explosive Cotton, Memoranda on. By W. B. O'Shaughnessy, M. D., F. R. S., Co-Secretary Asiatic Society of Bengal,	177
Hog kind, or Suidæ, On a new form of the. By B. H. Hodgson, Esq.....	423
Hispid Hare of the Saul forest, On the. By B. H. Hodgson, Esq.....	572
Inscription on a Gun at Moorshedabad, Translation of an, with remarks. By Major St. G. D. Showers,.....	589
Inscription in the Nagarjuni Cave, Translation of the,	594
Image of Buddha found at Sherghatti, &c. Note on an. By Capt. M. Kittoe, 6th N. I.,	78
Kalan Musjeed, Some account of the. By Lieut. Henry Lewis, Artillery, Deputy Commissary of Ordnance, and Henry Cope, Esq,.....	577
Language of the Goonds as spoken in the District of Seonee, Chuparah; Specimen of the; comprising a Vocabulary, Grammar, &c. By O. Manger, Esq. Civil Surgeon, Seonee,.....	286
Local and Relative Geology of Singapore, On the, including Notices of Sumatra, the Malay Peninsula, &c. By J. R. Logan, Esq.	519

	<i>Page</i>
New or little known Species of Birds, Notices and Descriptions of various.	
By Ed. Blyth, Curator of the Asiatic Society's Museum,.....	117, 428
Notes, chiefly Geological, from Gooty to Hyderabad, South India, comprising a brief notice of the old Diamond Pits at Dhone. By Capt. Newhold,....	477
On Terebra Navalis, and a natural defence against its ravages. By Mr. Lehmann: from the Transactions of the Scandinavian Naturalists of Copenhagen, 1840. Translated and communicated by Dr. T. Cantor,.....	487
Oris Ammonoides of Hodgson, Observations on the. By Capt. T. Hutton, F. G. S.	568
Pindree Glacier, Notes of an Excursion to the, in September 1846. By Capt. Ed. Madden, Bengal Artillery, 226 (with an Addendum,)	596
Pigmy Hog of the Saul forest, Postscript on the. By B. H. Hodgson, Esq.	593
Proceedings of the Asiatic Society for January, 1847,	81
----- for February,	201
----- for March,.....	375
----- for April,	499
----- for May,	497
Report on the Society's affairs,.....	89
Ruins of Anuradhapura, formerly the capital of Ceylon, On the. By Wm. Knighton, author of the "History of Ceylon," and late Secretary, Ceylon Branch Royal Asiatic Society,	213
Rock Temples of Dambool, Ceylon, On the. By Wm. Knighton, Esq.,....	340
Refinage, on a large scale, by means of Nitre, of brittle or understandard Silver, for coinage purposes, and a ready mode of approximate assaying of Silver. By W. B. O'Shaughnessy, M. D. and F. R. S.....	557
Sequel to the Periplus of the Erythrean Sea, and on the country of the Seres, as described by Ammianus Marcellinus, Remarks on the. By James Taylor, Esq. Civil Surgeon, Dacca,	1
Steam Trip to the North of Baghdad, Journal of a, in April, 1846. By Lieut. Jones, I. N.,	301
Sculptures of Bôdh Gyah, Notes on the. By Capt. M. Kittoe, 6th N. I. ..	334
Species of Wild Sheep, some further notice of the. By E. Blyth, Curator of the Asiatic Society,	350
Students of Arabic, Hints to; extracted from a letter by Col. Lockett, ...	373
Tremenheerite, a new carbonaceous Mineral, Notice of. By H. Piddington, Curator Museum of Economic Geology,	369
Temple of Triveni near Hoogly, An account of the. By D. Money, Esq. Bengal Civil Service,.....	393
Viharas and Chaityas of Behar, Notes on the. By Capt. M. Kittoe, 6th Regt. N. I.,	272
Vedas, Report on the,	505
Zillah Shahabad, or Arrah, Geological Notes on. By Lieut. W. S. Sherwill,	279

INDEX TO NAMES OF CONTRIBUTORS.

	<i>Page</i>
Abbot, Capt. J. Account of the process employed for obtaining Gold from the sand of the River Beyass; with a short account of the Gold Mines of Siberia.	226
———, Process of working the Damascus Blade of Goojrat.	417
Blyth, E. Esq. Notices and Descriptions of various new or little known Species of Birds.	117, 428
———, Some further notices of the Species of Wild Sheep.	350
Cantor, Dr. T. On <i>Teredo Navalis</i> , and a natural defence against its ravages.	487
Hodgson, B. H. Esq. On a new form of the Hog kind or <i>Suidæ</i>	423
———, On the Hispid Hare of the Saul forest.	572
———, Postscript on the Pigmy Hog of the Saul Forest.	593
Hutton, Capt. T. Observations on the <i>Ovis Ammonoides</i> of Hodgson. ..	568
Jones, Lieut. Journal of a steam trip to the North of Baghdad.	301
Kittoe, Capt. M. Instructions how to take Correct Facsimiles of Inscriptions.	366
———, Notes on the Caves of Burábur.	401
———, Hints on the Easiest Method of taking and preparing Drawings for Lithograph.	368
———, Note on an Image of Buddha found at Sherghatti.	78
———, Notes on the Sculptures of Buddha Gaya.	334
———, Notes on the Viháras and Chaityas of Behar.	272
Knighton, W. Esq. On the ruins of Anurádhapura.	213
———, On the Rock Temples of Dambool, Ceylon.	340
Lewis, Lieut. H. and H. Cope, Esq. Some account of the "Kalán Musjeed,"	577
Lockett, Col. Hints to Students of Arabic.	373
Logan, J. R. Esq. On the Local and Relative Geology of Singapur.	519
Long, Rev. J. Archæology of India, Queries on the,	285
Madden, Capt. E. Notes of an Excursion to the Pindree Glacier in September, 1846.	596
Manger, O. Esq. Specimen of the Language of the Goonds as spoken in the District of Seonee, Chuparah.	286
Money, D. Esq. An account of the Temple of Triveni near Hugly,	393
Newbold, Capt. T. Notes chiefly Geological, from Gooty to Hydrabad. ..	477
Piddington, H. Esq. Examination of some Atmospheric Dust from Shanghai, forwarded to the Asiatic Society, by D. L. Macgowan, Esq.	193
———, On a new kind of Coal, being VOLCANIC COAL, from Arracan.	371
———, Notice of Tremenhceerite, a new carbonaceous Mineral.	369

	<i>Page</i>
O'Shaughnessy, Dr. W. B. Memoranda on Explosive Cotton,	177
—————, On the Refinage on a large scale, by means of Nitre of brittle or understandard silver for coiuage purposes; and on a ready mode of approximative assaying of silver,	557
Roer, Dr. E. Bháshá Porichéda, or Division of Language; a logical Treatise, translated from the Sanscrita,	157
Sherwill, Lieut. W. S. Geological Notes on Zillah Shahabad,	279
Showers, Capt. St. G. D. Translation of a Inscription on an Gun at Moor- shedabad, with remarks,	589
Taylor, J. Esq. Remarks on the Sequel to the Periplus of the Erythrean Sea, &c.	1



LIST OF PLATES.

PART I.

<i>Plates.</i>	<i>Page</i>
No. I.	78
II.	222
III.	224
IV.	267
V.	272
VI.	273
VII.	340
VIII.	408
IX.	409
X.	411
XI.	418
XII.	423
XIII.	427
XIV.	573
XV.	} 578 & 579
XVI.	
XVII.	
XVIII.	
XIX.	

ERRATA.

PART 1ST.

Page Line

- 301 12 for Triunba read Trúmba.
 „ 19 for Sherí at el Beitha read Sherí 'at el Beitha.
 302 4 for Tarimyer read Tarmíyeh.
 „ 12 for Jeddiah read Jedídah.
 „ 18 for Jeddiah read Jedídah.
 303 10 for After "When it bore East" read On the right bank, &c.
 „ 17 for Khiyat read Khayt.
 „ 24 for Jeddiah read Jedídah.
 „ 3 for (in note,) Keif read Kúf.
 „ 6 for Nhar read Nahr.
 304 8 for bending read trending.
 „ 18 for Dojin read Doj'm.
 „ 3 of note, Seghimeh read Seghirmeh.
 „ 4 for Sir read Sú, and for Tau read Táúk.
 „ 67 for Hamria read Hamrín.
 „ 11 for Hamrool read Hamrín.
 „ 13 for Physens read Physcus.
 „ „ Last of note, Opio read Opis.
 305 23 for Daláhee and Lagros read Daláhu and Zagros.
 „ 24 for Malwujep read Malwíyeh.
 306 28 for approached read approach.
 „ 29 for was read is.
 307 1 for Siel el Azeez read Sid 't Azeez.
 308 3 & 5 for Maluryeh read Malwíyeh.
 309 9 for passing read passes.
 „ 25 for Malwújeh read Malwíyeh.
 313 19 for Hebla read Kebla.
 315 3 for round read mound.
 „ 6 for Shiragoor read Shirazoor.
 „ 2 of note, "Ustrima" read "Ustrina."
 „ 13 for Sammariah read Samarrah.
 „ 18 & 22 for Dina read Dúra.
 „ 28 for Sammariah read Samarrah.
 316 19 for this read thus.
 „ 24 for present read personal.
 317 9 for Yet alij read Tel alij.
 „ 10 for Apis read Opis.
 „ 22 for Mahrwan read Nahrwán.
 „ 24 of note, for it read is.
 „ 29 for Zellar read Tellúl.
 „ 37 for Malwryeh read Malwíyeh.
 318 17 for had read hove.
 319 16 & 17 for after the numerals° and not t.
 „ 16 for Mahirgeh read Malwíyeh.

Page	Line	
319	21	for Abri Delif & Maluryeh read Abú Delif Malwiyeh.
„	24	for Majainmah read Majammah.
„	25	for On the east side, &c. read On the east side.
„	26	for Mahrwan read Nahrwán.
322	12	of note, for analysis read anabasis.
„	23	for M. Batta read M. Botta.
323	12	for Asperiall read Aspinal.
„	21	for “Durn” read “Dum.”
325	25	for Tekriths read Tekritlis.
326	11	for “Al’arab” read “Al’Arab.”
„	14	for Tekrith read Tekritlís.
„	24	for a Scorpíi read a Scorpü.
„	13	for Khanisah read Kanísah.
327	2	for Arnin read a ruin.
„	3	for Kamsah read Kanísah.
„	4	for “El Tet’bha” read “El Fet’hha.”
„	6	for S. W. read N. W.
„	4	of note, for (Tageit) read (Tagrit).
328	1	for easting read casting.
„	13	for Khalidj—fresh sentence, Observing, &c.
„	24	for Extending to the Eastd. read Extending to the Eastd. from it ;
„	1	of note, for “E. Seliva” read “El Selwa.”
329	2	for Mejiris read Nejiris.
„	„	for Nejin read Nej’m.
„	6	for gazing read grazing.
„	8	for tints read tents.
330	6	for “El Tettha” read “El Fet’hha.”
„	9	for Makhal read Mak’húl.
331	31	for Maluryah read Malwíyeh.
„	34	for Tholush read Tho’lýeh.
332	11	for Trumbee read Trúmba.
„	12	of note, for Al Athus read Al Athur.
„	14	for Bukhtyari read Bakhtiyári.

ADDITIONAL ERRATA IN PART 2D.

614	16	for POTAMIDA read POTAMIDÆ.
621	23	for <i>biporcatus</i> read <i>porosus</i> .
623	note,	for <i>Geckotidæ</i> read <i>Geckonidæ</i> .
643	3	for on the Pinang read in the Pinang.
656	5	for <i>Polycopodium</i> read <i>Polypodium</i> .
909	14	for $3\frac{3}{8}$ inch read $0\frac{3}{8}$ inch.
921	30	for HEXAHONOTUS read HEXAGONOTUS.
927	6	for <i>catenularies</i> read <i>catenularis</i> .
929	5	for Dryiphis read Dryiophis.
1066	11	for <i>twelveth</i> read <i>twelcth</i> .

JOURNAL

OF THE

ASIATIC SOCIETY.

JANUARY, 1847.

Remarks on the Sequel to the Periplus of the Erythrean Sea, and on the country of the Seres, as described by Ammianus Marcellinus : By JAMES TAYLOR, Esq., Civil Surgeon, Dacca.

At a period long anterior to the navigation of the Erythrean Sea by the Egyptian Greeks, the Arabians carried on a trade with India, and were the means, either directly, or through the Phœnicians, of supplying the Western world with the valuable productions of the East. It is generally supposed that they availed themselves of their knowledge of the monsoons to make periodical voyages to this country across the open sea, and that they had settlements along its western coast, and even as far south as Ceylon. On these points, however, nothing certain is known ; and with the exception of the fact of there being enumerated in the Sacred Writings particular spices and perfumes which are the indigenous productions of India, there remains little or no evidence of the trade that existed between Arabia and the farther East at the remote period here referred to. Of the extent to which Indian commerce was carried on by the Sabeans, and Phœnicians ; of the commodities they gave in exchange for the merchandize they imported ; or of the emporia on the Indian coast, whither they repaired for the purpose of traffic, we are entirely ignorant : and indeed, of the ancient trade of India generally, it may be said, that we have no authentic information prior to the Christian era.* The earliest work extant, in which a detailed account

* Appendix, No. 1.

is given of the navigation and commerce along the coasts of India, is the *Periplus* of the Erythrean Sea. This treatise is ascribed by some geographers to Arrian of Nicomédia, the author of the *Periplus* of the Euxine Sea, but there is reason to believe that it was written not by him but by an Egyptian Greek of the same name, who, it is generally supposed, flourished early in the second century of the Christian era. Arrian of Alexandria, who appears to have been both a mariner and a merchant, delineates in this narrative or journal, the course of navigation along the coasts of Eastern Africa, Arabia, Persia, and India. He mentions their principal seaports or marts, and specifies the articles of merchandize found in them—distinguishing them by commercial names, composed in some instances, of Greek terms, in others, of words derived from the language of the country. How far Arrian extended his voyage along the western coast of India, we are not informed. It is supposed, however, that he did not proceed beyond Nelkunda, the modern Nelisuram on the Malabar coast: and the account, therefore, which he gives of the countries situated to the south and east of this, is generally considered as the result, not of personal observation, but of information, obtained from native traders, whom he met in the ports of Western India. Rennell was of opinion that, in the time of the Ptolemies, the Egyptians sailed, not only beyond Cape Comorin, but even up the Ganges to Palibothra. It is probable, however, from what Strabo states, that foreigners seldom extended their voyages so far as the capital of India. He incidentally alludes, indeed, to sailing up the Ganges, or against the stream, to Palibothra; but he does not state, whether this was done by Egyptian or by native navigators, while in another place he distinctly informs us that few of the Egyptian merchants, who sailed from the Red Sea to India, ever proceeded to the Ganges; and adds that the persons, who made this voyage, were illiterate and incompetent to comprehend matters or questions relating to Geography.* He describes the Ganges as entering the sea by a single mouth or outlet†—an error which must be ascribed to the imperfect knowledge that the Egyptian traders had of the Gangetic Delta, and which Strabo could not have committed, if these navigators had been in the habit of ascending this river as high as Palibothra. It would seem from the *Periplus*, that the trade between Malabar and Coromandel was

* Strabo, 686.

† Ibid, p. 690.

carried on in the coasting vessels of the country : but that voyages from the latter coast to the Ganges were made in ships, that sailed across the Bay of Bengal. These were native or country-built vessels, and like the ships described by Fa Hian about the end of the 4th century, as sailing from the Ganges to Ceylon and thence to China, they appear to have been manned by Hindoos.* That the Hindoos were a maritime people in ancient times, is now generally admitted. In evidence of this fact, may be mentioned the allusion to marine insurance in the Institutes of Menu, the circumstance of Hindoos having formerly resided in Java, and the notice "in poems, tales, and plays dating from the 1st century before to the 12th century after our era, of adventures at sea in which Indian sailors and ships alone are concerned."† Mention is made in the Brihatkatha of a "king of Bengal who proceeded on an expedition to the coast, and of Srimanta, Chand, and Dhanapati, celebrated native merchants, who made periodical voyages in a fleet to Ceylon."‡ The historians of Ceylon relate that a king named Wijeya, who held the sovereignty of their island for a period of thirty-eight years commencing B. C. 543, was a native of Bengal, and that he had been exiled by his father Singababu, king of the latter country, who, it is said, sent him away with seven hundred followers to seek his fortune on the sea.§ It may be inferred from these circumstances, which so directly prove the early maritime communication between Bengal and Ceylon, that the transportation of merchandize from the Ganges to the marts of Southern India was effected by the natives of the country, that the Egyptian traders seldom extended their navigation beyond Cape Comorin, and that the commercial intercourse that existed between them and the natives of Bengal centred in the ports of Southern India. Arrian appears to have derived his information regarding the navigation of the Bay of Bengal from native traders whom he met in some of these ports, and to their inaccuracy in geographical details, and love of the marvellous, may be ascribed the errors and fabulous statements which occur in his description of the countries, and tribes of Eastern India.

The concluding part of Arrian's journal, which relates to countries

* Professor Wilson's Account of the Foe Kue Ki, in Jour. Royal As. Soc. Vol. 5, p. 108

† Ibid.

‡ Preface to Bengálí Dictionary by Babu Ram Comul Sen.

§ Knighton's History of Ceylon, p. 11, 51.

eastward of Cape Comorin, is regarded as a supplement to his work, and is hence designated the Sequel to the Periplus of the Erythrean Sea. The first place mentioned in it after leaving Kolkhi, is the bay of Argalus, where the pearls brought from the island of Epiôdorus, supposed to be Manar, were perforated ; and where, also, the fine muslins called Ebargeitides were sold. Proceeding along the Coromandel coast, the author enumerates certain marts called Kámara, Padooka, and Sôpatma, which carried on an extensive trade with the sea port of Limúrikè. He next notices the island of Palaisimoodus, (the Taprobana of other ancient authors) or Ceylon, which he describes as a country of great extent, “the northern part of which” is civilized and frequented by vessels, equipped with masts and sails ; and returning thence to the coast beyond or to the north of the marts above mentioned, he gives a brief account of a district called Masalia, which is evidently the modern Masulipatam. The portion of the sequel, which is descriptive of this place and of countries farther to the east, forms the subject of the following remarks. It is thus translated by Dr. Vincent :—

“Masalia, a district which extends far inland. In this country a great quantity of the finest muslins are manufactured. And from Masalia the course lies eastward, across a bay, to Dêsarênè, where the ivory is procured, of that species called Bôsaré.

“Leaving Dêsarênè the course is northerly, passing a variety of barbarous tribes ; one of which styled Kirrhadaë, a savage race, with noses flattened to the face. Another tribe are the Bargoosi ; and there are others distinguished by the projection of the face like that of the horse, (or by its length from the forehead to the chin ;) both which tribes are said to be cannibals.

“After passing these, the course turns again to the east, and sailing with the coast on the left, and the sea on the right, you arrive at the Ganges, and the extremity of the continent towards the east called Khrusè [or the Golden Chersonese.]

“The Ganges is the largest river of India ; it has an annual increase and decrease, like the Nile ; and there is a mart on it of the same name, through which passes a considerable traffic, consisting of the Gangetic spikenard, pearls, betel and the Gangetic muslins, which are the finest manufacture of the sort.

“In this province also there is said to be a gold mine, and a gold coin called Kaltis.

“Immediately after leaving the Ganges, there is an island in the ocean called Khrusè, or the Golden Isle, which lies directly under the rising sun and at the extremity of the world towards the east. This island produces the finest tortoise-shell that is found throughout the whole of the Erythrean Sea.

“But still beyond this, immediately under the north, at a certain point where the exterior sea terminates, lies a city called Thina, not on the coast, but inland ; from which both the raw material and manufactured silk are brought by land, through Bactria to Barugáza, or else down the Ganges [to Bengal] and thence by sea to Limúrikè, or the coast of Malabar.

“To Thina itself the means of approach are very difficult ; and from Thina some few [merchants] come, but very rarely : for it lies [very far remote] under the constellation of the Lesser Bear, and is said to join the confines of the Euxine Sea, the Caspian, and the Lake Meotis, which issues at the same mouth with the Caspian into the Northern Ocean.

“On the confines, however, of Thina, an annual fair or mart is established : for the Sesatæ, who are a wild, uncivilized tribe, assemble there with their wives and children. They are described as a race of men, squat, and thick set, with their face broad, and their nose greatly depressed. The articles they bring for trade are of great bulk and enveloped in mats or sacs, which in their outward appearance resemble the early leaves of the vine. Their place of assembly is between their own borders and those of Thina, and here spreading out their mats [on which they exhibit their goods for sale], they hold a feast [or fair] for several days, and at the conclusion of it, return to their own country in the interior.

“Upon their retreat, the Thinaæ, who have continued on the watch, repair to the spot, and collect the mats which the strangers left behind at their departure ; from these they pick out the haulm, which is called Petros, and drawing out the fibres, spread the leaves double, and make them up into balls, and then pass the fibres through them. Of these balls there are three sorts—the large, the middle-sized, and the small ; in this form they take the name of Malabathrum : and under this de-

nomination, the three sorts of that masticatory are brought into India by those who prepare them.

“All the regions beyond this [towards the north] are unexplored, either on account of the severity of the winter, the continuance of the frost, or the difficulties of the country; perhaps also the will of the gods has fixed these limits to the curiosity of man.”*

Such is Arrian's description of the northeru part of the Bay of Bengal, and of the countries of the farther East. He professes to trace the course of the navigation from Masulipatam eastward, but is so vague and obscure in his narrative as to lead us to conclude that he never visited this part of India. He delineates a line of coast from Desarene to the Ganges which is entirely imaginary, and places on it people that may be recoguized by their names, as tribes which are referred by the Hindoos to the interior of the country. In geographical accuracy, the Sequel is certainly inferior to the first portion of the Periplus, wherein the places on the western coast of India visited by Arrian himself are described, but in other respects it may be considered as equally correct, since most of the countries, tribes, productions, and customs that are mentioned in it, admit of being identified in the present day.

Masalia is evidently the Mæsolia of Ptolemy, the site of which is referred by D'Anville to that of Masulipatam or Masalipatam, as it is written in some books of travels. Masulipatam has long been celebrated for its cotton fabrics. Tavernier mentions as the peculiar manufacture of this place, “painted calicuts” or pencilled cloths, “called Calmendar,”† the finest qualities of which were perhaps the *sindones* (translated muslins) which are here alluded to by Arrian. He also speaks of Masulipatam as possessing the best anchorage in the Bay of Beugal, and as being the principal port on the Coromandel coast, from which vessels sailed to Pegu, Siam, Arracan, Bengal, Cochin Chiua, Ormus, Madagascar, Sumatra, and Manilla.‡ A city called Tarnassari,§ which stood in the vicinity of Masulipatam, is mentioned

* Vincent's Periplus of Erythrean Sea, vol. II. page 523—528.

† Tavernier's Travels in India, Book I. Part II. Chap. XI.

‡ *Ibid.* ————— Book II. ————— Chap. X.

§ Tarnassari, which Dr. Vincent mentions, he could not find in modern maps, but the site of which, he supposes, may have been between Pulechat and Bengal, is laid down in a map attached to Sir Thomas Herbert's Travels (p. 336) on the banks

by Barthema and Vertomannus,* who visited India between the years 1490 and 1502, as the port whence they sailed direct to Bengal. This locality, indeed, appears from the earliest times to have been the point on the Coromandel coast from which most of the vessels destined for distant ports, took their departure; and it may therefore be regarded, as identical with the emporium situated in Mæsolia, and mentioned by Ptolemy as the place *unde solvunt qui in Chrysam navigant*, or with the Masalia of the Sequel, whence vessels sailed to Desarene. The bay, across which the course is mentioned as extending eastward, can be no other, with reference to the position assigned to it, than the upper or northern part of the Bay of Bengal, stretching from Masulipatam to Balasore. No account is given of the ships in which the navigation of this part of the bay was made, but doubtless they were similar to the vessels that frequented the ports of Kamara, Padooka, and Sopatma on the Coromandel coast, where, according to Arrian, were found "the native vessels, which make coasting voyages to Limúrikè, the Monoxyla of the largest size called Sangara, and others styled Colandiophonta, which are vessels of great bulk and adapted to voyages made to the Ganges and the golden Chersonese." The Sangara vessels, (*Σαργαρά*) named Monoxyla by the Greeks, are met with in various parts of India, and are used both in coasting and inland navigation.† In some of the eastern districts of Bengal as Dacca, Sylhet, and Mymensing, this kind of boat is called Saranga; it consists, as the Greek term *μονοξύλον* implies, of one tree or timber,‡ which is scooped out to form the hull of the vessel,§ two or more tiers of planks being generally placed on each side to enlarge its dimensions. Large canoes of this kind are common in Assam. The Bulam boats of Chittagong,

of the Kistna at some distance inland from Masulipatam. In Nieuhoff's Travels, (in A. D. 1662) it is placed on the south side of the river Nagunda, in the site, apparently, of Temerycotta.

* Vertomannus's Voyages, R. Eden. London, A. D. 1576.

† Pliny mentions that the Monoxyla of the Malabar coast were used for transporting pepper from the interior.

‡ From *μονος* one, and *ξύλον* wood.

§ Dr. Clarke mentions boats of this kind on the Don. (Vide Clarke's Travels in Russia, Tartary and Turkey.) In the South Seas, two of these canoes are joined together by transverse planks forming a kind of deck. The Jangar (Sangara?) of the Malabar coast is a double platform canoe of this description.

and the Goddo vessels of Arracan, are Monoxyla of a large size, and like those mentioned in the text, are used in coasting navigation. These vessels are built of several rows of planks firmly fastened together with coir and ratan. Methold, speaking of the trade between Bengal and Masulipatam early in the 17th century, remarks: "Once a year there arriveth at Masulipatam from thence a fleet of small vessels of burden about 20 tons, the planks only sewed together with *cairo* (a kind of cord made of the rinds of cocoanuts and no iron in or about them)." (Vide Purchas's Pilgrims). The voyage, however, from the Coromandel Coast to the Ganges, was performed, not only in monoxyla, but also in vessels called Colandiophônta, which appear to have been ships of considerable burthen and constructed for sailing on the open sea. Fa Hian, who visited India about the close of the 4th century of our era, alludes to large-sized vessels, which, in all probability, were identical with the Colandiophônta here mentioned. He states that on proceeding to To-mo-li-ti,* a city situated at the confluence of the Ganges with the sea, he found a number of merchants embarking in large ships to sail to the south-west; that he took a passage in one bound for Ceylon: and that the wind being favourable, the north-west monsoon having set in, he arrived there in fourteen days.

The region called Dêsarênè (*Δησαρηνή*) situated across a bay and eastward of Masalia, is supposed by some, to be northern Circars—by others, to be Orissa. That it is not the latter province, however, is certain from the fact of Utcala or Orissa, and Dêsárána or Desarene being mentioned as different countries in the Brahmanda Purana; both being included with Traipura or Tipperah among the kingdoms belonging to the empire of Bharata, and situated behind the mountains of Vindhya.† The term Dêsarênè on the supposition that it is a compound of the words *des* a country, and *aruni* a wilderness or forest, might be regarded as referring to the extensive tract of jungle on the southern part of Bengal, viz., the Sunderbunds bordering on the sea. Arrian, however,

* To-mo-li-ti is supposed to be the Tamaralipta of the Mahabharat or the Tamaralipti of the Puranas. It is regarded as the modern Tumlook (Vide Professor Wilson's Account of Fa Hian's Travels in the Journal of the Royal As. Society, No. IX. page 138.)

† "Wilford's Essay on the Sacred Isles of the West." As. Res. Vol. VIII. page 337.

mentions Dêsarênè as situated—not in the vicinity of the Ganges, but at a considerable distance from it; and it is probable, therefore, that he refers to an inland country or tract of jungle, lying on the south-west side of Bengal, and called in ancient times, from its constituting ten forest cantons,—Dásáránya or Dásáraná.* It seems to have comprised Sumbhulpore (celebrated for its diamonds) Sirgoojia, Ramghur, and Chota Nagpore, whence come, according to Wilford, the rivers Cocila or Koil and Bráhmāni, the united streams of which form the river Dosaron of Ptolemy.† In the Vishnu Purana, the Dosarnas are mentioned as a tribe or nation, and are designated by Professor H. H. Wilson in his translation of that work, “the people of the ten forts subsequently multiplied to thirty-six, such being the import of Chat-tisgerh, which seems to be the site of Dosarana.”‡

The words rendered: “the ivory of that species called Bôsarè,” are ἐλέφαντα τὸν λεγόμενον βωσαρή in the original. Dr. Vincent supposes that they refer to the horn of the Rhinoceros, but it is more probable that βωσαρή is a corrupt compound of *Bous*, or *Bos*, and *Arnee*, (the Hindee name of the buffalo) contracted into Bôsarè; and that ἐλέφαντα does not here signify ivory, but denotes the gigantic or elephantine size of the wild buffalo. *Baeare*, it may be mentioned, is the name which is given to the wild male buffalo in the eastern part of Bengal. Large bovine animals, as the buffalo and the bison, are frequently compared with the elephant, or have from their huge size, the term *elephant* applied to them. In Abyssinia, buffaloes are called elephant-bulls, not only from their immense bulk, but also from their naked black skin resembling that of an elephant.§ (Rees’s Encyclopedia Art. Bubalus.) Speaking of the Urus (*Bos sylvestris*) of the Hercynian forest, Cæsar remarks: “these Uri are little inferior to elephants in size, but are bulls in their nature, color, figure.”|| Marco Polo, in describing the buffaloes of Bengal, also observes: “Oxen are found in Bengal as tall as elephants, but not equal to them in bulk.”¶ The “*Bos Indicus*,”

* Ancient Geography of India. As. Res. Vol. XIV. p. 391.

† Wilford. As. Res. Vol. XIV. p. 405.

‡ Wilson’s Translation of the Vishnu Purana, page 180.

§ Elephants are mentioned under the name of “*Lucæ boves*” by Pliny.

|| DeBello Gallico Lib. VI. Chap. XXVIII.

¶ Marsden’s Translation of the Travels of Marco Polo.

which Elian mentions as having horns large enough to contain three *amphoræ*,* is evidently the Arnee or wild buffalo of India, which is remarkable for the immense size of its horns. It is the animal described by modern Naturalists under the name of the Gigantic or Taur-elephant Arnee,† an appellation, which it happens singularly enough is synonymous with ἐλέφαντα βωσαρή, the latter being a compound of βωσ and ἀρή. The Taur-elephant Arnee, which is also the quadruped referred to by Marco Polo, was formerly a denizen of the forests of Ramghur, which, together with Chota Nagpore, formed a part of the region of Dasaranya or Dasarana of the Puranas, or the Dêsarênè of the Periplus. The words, therefore, of the text, ἡ Δησαρηνη χώρα φέρουσα ἐλέφαντα τὸν λεγόμενον βωσαρή translated by Dr. Vincent “Desarene where, the ivory is procured of that species called Bôsarè,” should be rendered *Desarene where, the elephant-sized animal is procured of that species or variety called Bôsarè.*

The course or track of sailing after leaving Dêsarêné, is described as extending in a northerly direction along a line of coast inhabited by various barbarous tribes, one of which styled Kirrhadaë (κιρραδαί) is characterized as “a savage race with noses flattened to the face.” The Kirrhadaë are regarded by some writers as a tribe of the “mountain and jungle tracts of Orissa,”‡ but the well marked Indo-Chinese feature, here ascribed to them, clearly indicates that they are a people of Eastern India. Dr. Vincent considers them, as the Mughs of Arracan, but it is more probable, that they are the Kiratas of the Puranas, and, that like Dêsarênè, their country is here erroneously described by Arrian, as bordering on the sea. In the Puranas they are designated “forest-ers;” “barbarians;” “mountaineers”§—appellations which are understood as referring to the inhabitants of the mountains of Eastern India. In the Brahmakanda Purana they are described as “shepherds living on the hills to the north-east of Bengal.”|| The Kiratas, who possess a

* Cuvier’s “Theory of the Earth,” page 69.

† “The Gigantic or Taur-elephant Arnee which appears to be a rare species, only found single or in small families in the upper eastern provinces and forests at the foot of the Himalaya, though formerly met in the Ramghur districts.” (Cuvier’s Animal kingdom by Griffith’s and others. Vol. IV. p. 389.)

‡ Murray’s Ency. Geograph. Part I. Book I. Chap. II. Sec. VII.

§ Wilson’s Translation of the Vishnu Purana, pages 175 and 190.

|| Wilford’s Essay on the Sacred Isles of the West. As. Res. Vol. VIII. p. 38

tract of hilly country in the Morung, to the west of Sikhim, and situated between Nepal and Bhotan, appear to be the descendants of the ancient Kiratas. Like almost all the aboriginal hill tribes of Eastern India, the Kiratas have the Mongolian features ascribed to the Kirrhadæ: they are described as a brave and warlike race, and are said to have been an independent and a powerful people in former times. One of the ancient dynasties of Rajahs that governed Nepal, belonged to the "Kirrat tribe of Eastern mountaineers." It comprised twenty-seven princes, the first of whom reigned B. C. 640.* The founders of this dynasty were probably Hindus, viz., the Kiratas classed by Menu among the tribes who were expelled from the caste of Kshatriyas. That the Kirrhadæ of the Sequel are identical with the Kiratas of the Puranas, or Kiratas of the Morung, is further probable from the circumstance of the Bargoosi being associated with them—the latter tribe being the Bhargas mentioned in the Vishnu Puranas, as neighbours of the Kiratas.† Arrian has erred in placing the Kirrhadæ on the coast and on the western side of the Ganges. Ptolemy, with greater accuracy, has assigned to them an inland position eastward of that river. He describes their country as one of *India extra Gangem*, situated higher up than, or north-west of, a range of mountains called Mœandrus,—in the vicinity of which, there was a tribe or people named Pladæ, or Besadæ. Mœandrus is the Garo range of hills to the east of Sylhet and Mymensing—the position assigned to it by D'Anville; while Kirrhadia, from the relative situation given to it by Ptolemy, may be regarded as the country of the Kiratas in the Morung. The Besadæ, like their neighbours the Kirrhadæ, are described as flat-nosed, broad-faced, of a white colour (that is of a fair complexion when compared with the people of the plains) and of a short stature, which are characteristic features of most of the hill tribes on the eastern frontier of Bengal. The country of the Kirrhadæ, according to Ptolemy, was celebrated for its malabathrum; and on the supposition that this article is betel, Vincent refers the Kirrhadæ to Arracan and the country about the mouth of the Megna, where betelnut is extensively cultivated. Malabathrum, however, is not betel, but a species of *Cinnamomum albiflorum* which abounds in

* Prinsep's Genealogical Tables.

† Wilson's Translation of the Vishnu Purana, page 190.

the valleys along the base of the mountain ranges from Sylhet to Missouri.* It is said to be of a superior quality in the Morung, and doubtless, it is to this latter locality, which constitutes the country of the Kiratas, that Ptolemy alludes, when he states : ὑπὲρ δὲ τὴν Κιρράδιαν ἐν ἧ φασὶ γίνεσθαι τὸ Κάλλιστον μαλάβαθρον, viz., that the best malabathrum is produced in the country of the Kirrhadæ.

The Bargoosi (*Βαργυσων*) are an ancient hill tribe of Eastern India, called Bhargas in the Vishnu Purana.† The Bhargas and Kiratas are there mentioned as people of the East who were subdued by Bhima. This accords with a tradition current in Nepal and in the Morung, viz., that Bhimsen the son of Pandu (the Bhima of the Vishnu Purana) had dominion in that part of India, it being further stated that he was the “king of 1,10,000 hills that extended from the source of the Ganges to the boundary of the Plub, or people of Bhotan.” The Kirats mention Belkath in the Morung, as having been the site of the capital of his kingdom.‡

The mention of people “distinguished by the projection of the face like that of the horse (*ἰππιόπροσώπων* and *μακροπρόσώπων*) is not a fiction of Arrian’s, but an absurdity, which he borrowed from the natives of the country, various fabulous or marvellous tribes of the description alluded to in the text, being mentioned in the Puranas, as inhabiting the mountains of Eastern India. Wilford, in speaking of a people in the vicinity of Bhotan, described by Ctesias as having the head and nails of a dog, remarks : “We read also of tribes with faces like horses in these mountains.”§ He also states that mention is made in the *Vara Sanhita Purana* of a people called “Asvavadana” or horse-faced, and “Purushada” or cannibals.|| The belief, indeed, in the existence of people of forms or shapes, such as are here mentioned, has been entertained by the natives of India from the earliest times ; and to them, doubtless, must be ascribed the origin of the numerous fabulous stories related by ancient authors from Megasthenes downwards, viz., “of men with ears so large that they could wrap themselves up in them, of others

* Buchanan—Royle.

† Wilson’s Translation of the Vishnu Purana, page 190.

‡ Martin’s Eastern India, Vol. 3, p. 38. As. Res. Vol. IX. page 68.

§ Wilford. As. Res. Vol. IX. p. 68.

|| Wilford. As. Res. Vol. VIII. p. 338.

with a single eye, without mouths, without noses, with long feet and toes turned backwards, of people only three spans in height.”*

The existence, however, of cannibals in the hilly countries bordering on the eastern frontier of Bengal is not fabulous, but a fact which is generally admitted in the present day. It was known to Herodotus upwards of two thousand years ago. Speaking of the natives of India, he remarks: “Some inhabit marshes and live on raw fish which they catch in boats made of reeds divided at the joint, and every joint makes a canoe. These Indians have a dress made of rushes which, having mowed and cut, they weave together like a mat and wear in the manner of a cuirass.” This account seems to refer to the aboriginal tribes of the low country beyond the Ganges, or the ancient inhabitants of the marshes of Mymensing and Sylhet. It is stated that to the east of them there are other Indians called Padæi (παδαῖοι) who are cannibals. Tibullus† describes them as a people of the farther east; and though they have been mentioned by Cellarius as belonging to India intra Gangem, yet it is certain from his testimony and that of Herodotus, as is stated in the work, entitled “Universal History,” that they were situated “to the east of the Ganges and even at a considerable distance from it.” Herodotus, speaking of their customs, observes—“If any man among them be diseased his nearest connexions put him to death, alleging in excuse that sickness wastes and injures his flesh. They pay no regard to his assertions that he is not really ill, but without the smallest compunction deprive him of life. If a woman be ill, her female connexions treat her in the same manner. The more aged among them are regularly killed and eaten: but to old age there are very few who come, for in case of sickness they put every one to death.”‡ The practice here detailed is followed in the present day by a tribe of Kookis, who reside far in the interior of the Tipperah country. An intelligent native, who

* Robertson’s Ancient India, p. 34.

“The Assamese believe in the existence of a tribe called Barkanas having ears hanging down to the waist: the left ear serves as an ample bed to sleep on with sufficient to spare to wrap the body up in.” Wilcox. As. Res. Vol. XVII. p. 456. Appendix, Note II. The same idea is also entertained by many of the natives about Dacca.

† “Ultima vicinus Phœbo tenet Arva Padæus.” Lib. IV. Eleg. 1. V. 45.

‡ Rennell’s Herodotus, p. 308.

had been employed by the late Mr. Scott, Governor General's Agent in Assam, to explore some of the countries in the vicinity of that valley, lately assured me that he and his party once met a tribe of Kookis, who made it a practice to kill the sick and aged among them, and to eat their flesh. He mentioned that he had ocular demonstration of the fact, and that he ascertained it was the practice among them, to allow neither the aged to die from natural decay, nor the young or old to be cut off by disease, but to anticipate this result by slaying them, and then to eat their bodies. They believed that by so doing, they prevented the transmigration of the soul of the deceased into the body of an inferior animal, and that they thus retained it among them. The Battas of Sumatra, and the tribe of Gonds called Binderwurs,* near the source of the Nerbuddah, are cannibals like the Kookis here mentioned. They kill and eat the sick and the aged among them. Dr. Leyden considers the former as the Padæi of Herodotus, but it is more probable that the latter were the cannibals of the Tipperah hills. Besides the Kookis of the Tipperah and Chittagong hills, there are other tribes called Abor and Tikleya Nagas on the northern part of Assam, who are mentioned by Dr. Buchanan as cannibals. They appear to be the Anthropophagi of Ptolemy, mentioned by him as inhabiting together with the Anuibi, &c. a country on the northern side of Serica.

Arrian states, that "after passing these," (viz., the Kirrhadæ, Bargoosi, and other barbarous tribes) "the course turns again to the east, and sailing with the coast on the left and the sea on the right, you arrive at the Ganges." This has been supposed to refer to that part of the bay which extends from Orissa to the eastern mouth of the Ganges; but the tribes, mentioned in the text, cannot possibly be identified with people inhabiting any part of the coast situated between Masulipatam and the Ganges; and the course or track of sailing, which Arrian here describes, must, therefore, be regarded as erroneous. Désarèné and the country of the Kirrhadæ and Bargoosi are, not maritime, but inland regions; and it is obvious, therefore, that the line of coast, which is here delineated, is entirely imaginary.

Arrian correctly describes the Ganges as being the largest river in India, and as having an increase and decrease, or a periodical rise and fall, like the Nile. Herodotus alludes to the Ganges, not by name, but

* Coleman's Hindu Mythology.

as the river beyond which, the tribes living in marshes and the cannibals called Pàdæi, were situated. Iambulus, the history of whose life and travels is recorded by Diodorus Siculus,* appears to have been the first foreigner who arrived at the mouths of the Ganges. It is not known in what age he lived, but it is probable, that it was subsequent to Alexander's expedition to India. He and his companion after leaving the island (supposed to be Ceylon) where they had resided for seven years, came to the territory of a king of India, *through sandy and shallow places of the sea* (the mouths of the Ganges), and were there shipwrecked. The companion of Iambulus was drowned, but he himself was cast on shore and carried by the villagers to the king at the city of Palibothra, many days journey distant from the sea. The king, who had a great regard for the Greeks, received him well, and supplied him with the means of enabling him to return to Greece. Strabo, as I have already stated, describes the Ganges as having only one mouth. Ptolemy, however, mentions it as terminating by five branches called Cambusiam, Magnum, Camberichum, Pseudostomum and Antibole, which are enumerated with reference to their relative position as first, second, third, fourth, and fifth—Cambusiam the most westerly branch, being the first, and Antibole the most easterly, the fifth one. Wilford remarks: "Ptolemy's description of the Delta is by no means a bad one, if we reject the longitudes and latitudes as I always do, and adhere solely to his narrative which is plain enough." Accordingly, he identifies the Cambusiam branch with the Balasore river, which, he states, was in former times erroneously supposed to be a branch of the Ganges. The Ostium magnum is regarded as the Hooghly. The Camberichum derives its name from the Cambàdàcea or Cambaric river—the Jumna or Jubuna river which unites with the Ganges and Saraswati at Treveni near Hooghly. The Pseudostomum, or false mouth, was probably so called, because it lay "concealed behind numerous islands," and was "often mistaken for the easternmost branch of the Ganges." Antibole was the most eastern channel of all, and is the Dacca river, or the old Ganges, as its name of Buri-Ganga imports. It seems from the Periplus Marciani Heraeleotæ† to have been the limit or boundary of India extra Gangem, and the point from which measurements and dis-

* Lib. II. Cap. IV.

† Geograph. Veter. Script. Gr. Minores. Hudson, Vol. I. p. 28.

tances relating to countries in India were frequently made. Pliny alludes to a large island situated between two branches of the Ganges. It was called Modogalica or Modogalinga, and is described as constituting the territory of a separate people or nation. According to Wilford, the upper part of the Bay of Bengal was divided into three parts, called in general Calinga, or the sea shore in Sanscrit, from its abounding with creeks. Modo-Galenca or Galinga from the Sanscrit Madhya Calinga, or middle Calinga, comprised the Delta of the Ganges; the country between Cuttack and the western branches of the Ganges being the western Calinga, and Arracan or the country of the Mughs the eastern one (Errata et Addenda As. Res. Vol. IX.). Madukali, supposed to signify *Madhas creek*, seems rather to be synonymous with Madhya Calinga, or the middle region of creeks, and to be identical, therefore, with the Modogalinga of Pliny. Modukali is situated on the river Borrassia between the Jessore and Furreedpore districts. Satore, which is within a few miles of it, is evidently a place of great antiquity: and, in all probability, it was the site of the capital of the ancient Modogalinga. There are a great many ancient tanks in its vicinity, and large quantities of bricks are still found at a great depth under ground. There is also a very large mosque here, which appears, from its style of architecture, to have been built soon after the Mahomedan conquest of the country.*

The mart, which derived its name from the Ganges, (ἐμπορίον ἐσιν δμώνυμον τῷ ποταμῷ ὃ Γάγγης) appears from the circumstance of the fine Gangetic muslins being mentioned as an export from it, to have been an emporium situated in the vicinity of Dacca, where the finest cotton fabrics in all India have been made from the earliest times. It is likely, that it stood in the neighbourhood of Sonargong, situated about twelve miles to the south-east of the city of Dacca. Sonargong (Suvernagrama) is mentioned in the Sanscrit work called Jatimala,† as one of the countries in which the descendants of certain brahmins from Sacadwipa

* This mosque is perhaps the largest in the southern part of Bengal. It has nine domes supported by as many stone pillars, and its walls are of great thickness. The date of its erection is not known, but it is probable, from its style of architecture resembling that of some of the mosques of Vicramapura and Sonargong, that it was erected in the 13th century.

† See enumeration of Indian classes. As. Res. Vol. V. p. 56.

settled in early times. A remote antiquity also attaches to it, from its possessing a place called *Panchomee Ghaut* which, tradition asserts, derived its name from the circumstance of the five sons of Pandu, viz., Yudhisthera, Bhima, Arjunah, Nakula, and Sahadeva, having bathed there on the occasion of the Asocashtami festival, which is held in the month of March. In the historical annals of Ceylon mention is made of Singababoo, who shortly before the death of Buddha, obtained the throne of Bengal, then designated Wango, apparently a corruption of Vanga or Banga (See Knighton's History of Ceylon). The ancient Hindu capital of the kingdom of Banga, or Bengal, was situated (at a later date than that above referred to) in the vicinity of Sonargong, at a place called Vicramapura.* The latter now constitutes a pergunnah, which comprises a considerable tract of country around Feringy-bazar on the western bank of the Issamuty,† formed by the junction of the Dellasery and Luckia rivers. It is said to have been originally an island, and to have derived its name from Rajah Vicramaditya, who is supposed to have resided here for some time. This prince was probably Sriman Hersha Vicramaditya, the ruler of Oojeen, "who, after expelling the Mlèch'chhas and destroying the Sacas, had established his power and influence throughout India." Pravaraséna, a king of Cashmere, who flourished in the second century of the Christian era, is said to have waged war against the kingdoms of the south, and to have defeated the son and successor of Vicramaditya, named Pratapa Sila or Siláditya. He is represented by Bedea ad-din, a Mahomedan historian of Cashmere, as having invaded Bengal; and after subduing Behar Sinh, the ruler of Dacca (Sonargong), he is said to have given the government to Palas Sinh, the son of Siláditya, whom he had conquered.‡ Vicramapura was, at a subsequent period, the place of residence of Adisur and Bullal-sen, whose rule, it is well known, extended over the whole of Bengal. Prior to the time of Adisur, Bengal was under the government of the kings of Magadha, from whose yoke he is said to have delivered it. Banga was the eastern kingdom belonging to his

* "Vicramapura in Bengal, which is Paundraka" is inscribed on the Kesava Sena Plate found at Edilpore in zilla Backergunge (Vide Jour. of As. Society, No. 73, for January 1838.)

† See Rennell's Map of the environs of Dacca.

‡ As. Researches, Vol. XV. page 41.

dominions, and from it Bengal derived its name. Bullal-sen, who is supposed to have reigned in the 12 century* of our era, is generally regarded by the Hindoos, as the adopted son and successor of Adisur; but in the *Ayeen Akbery*, these princes are represented as the founders of two distinct dynasties—the Pal Rajahs being placed between them. Bullal-sen, regarding whose birth the natives have some fabulous stories, is said to have been descended from the family of Dhee Sinh, who reigned over Hindoostan, and whose descendants sat upon the throne of Delhi for a period of 137 years.† Lakhsmān (Lokymon), the son of Bullal-sen, built the town of Gour, in the vicinity of which there were, prior to his time, only small forts to which Adisur and Bullal-sen occasionally came from Sonargong, to watch over the frontier. It is mentioned by Rennell, on the authority of Dow, that Gour was built about 730 years before the birth of Christ, but according to Dr. Buchanan, there is no tradition to this effect among the natives of the country. The latter states: “When Adisur erected a dynasty that governed Bengal, although he resided mostly at Suvarnagram or Sonargong near Dhaka, he had a house in Gour, then probably near the western boundary of his dominions. The same continued to be the case during the government of his successor Bullal-sen. His son Lakshman, or Lokymon, extended his dominions far to the north-west, made Gour the principal seat of his government, and seems to have built the town in Gour, usually called by that name, but still also known very commonly by the name of Lakshmānty, corrupted by the Moslems into Loknowty. His successors, who seem to have been feeble princes, retired to Nodiya (Nuddea) from thence they were driven to the old eastern capital of Bengal.” (Martin’s *Eastern India*, Vol. III. page 68.)‡ The place where the palace of Bullal-sen stood, is still pointed out by the natives of Vicramapura. It is called Rampal, and is situated about two miles inland from Feringy-bazar.§ The site of the palace itself is named Bullal-baree, and like that of Bullal-sen’s residence at Gour, it consists of a level spot of ground covering an area of about 400 yards, surrounded by a wide ditch. No traces of buildings are to be seen on the surface of this inclosed space,

* *As. Researches*, Vol. V. page 64.

† See Preface to *Bengali Dictionary* by Babu Ramcomul Sen.

‡ Vide Appendix, Note II.

§ Rennell’s *Map of the Environs of Dacca*.

but in its immediate vicinity and in the country to some distance around it, there are found at a great depth under ground, the foundations of walls from which large quantities of bricks have been dug, and sent to Dacca and different places in the neighbourhood. Sculptured images of Hindoo gods, pieces of timber, large slabs of stone, and various articles of gold, and copper, consisting of ornaments and of vessels used in celebrating poojahs, have been excavated from these places. There is a tank in the centre of Bullal-baree, in which were deposited, it is said, the ashes of the Hindoo prince, who governed this part of Bengal, when it was invaded by the Mahomedans. It is called "Mitha Pukar," and is said by the natives to have belonged to that part of the palace which was occupied by the females of the Rajah's Court. Near it is the Agni-kunda, where the funeral pyre was kindled. Tradition asserts that the Rajah, when he went forth to oppose the invaders of his territory, took with him a carrier pigeon, whose return to the palace was to be regarded by the prince's family as an intimation of his defeat, and a signal therefore to put themselves to death. He gained the victory, it appears, but unfortunately, whilst he was stooping to drink from the river after the fatigues of the day, the bird escaped from the loose folds of his dress in which it was concealed, and flew to its destination. The Rajah hurried homeward, but arriving too late to avert the consequences of this unhappy accident, he threw himself upon the funeral pile still smoking with the ashes of his family, and thus closed the reign of the last dynasty of Hindoo princes in this part of India. The other objects of antiquity pointed out by the natives are a large tank on the banks of which the Rajah's elephants were picketted; the remains of a road leading to Sonargong on the opposite side of the river; several small mounds called Deool-baree, the sites of Hindoo temples: and a few more recent structures as mosques and bridges. One of the mosques is said to have been built by Pir Adam, who obtained possession of the country after the death of the Rajah. The natives state that there was in ancient times in Vicramapura, a mart called Lakhi bazar, which was under the direct control of the Rajahs, and that it was so designated from the circumstance of no merchant being allowed to carry on traffic in it, who was not possessed of property to the amount or value of one lac of rupees. This tradition, however improbable it may appear as regards the origin of the name of the mart, is in other respects, in strict accord-

ance with the spirit of the ancient Hindoo laws, which gave to the king a direct interference in the commercial affairs of the state. "In commercial affairs the king," says Heeren, "was permitted to exercise an extraordinary degree of influence. He might absolutely forbid the exportation of merchandize, or reserve the whole monopoly to himself. He issued ordinances relative to the buying and selling of goods; he regulated the price of the market, and received as his customary dues five per cent. on the profits of sale."* The mart of Vicramapura stood in a part of Bengal, which, from its numerous navigable rivers, possesses great facilities for inland trade. Situated at the confluence of the large rivers, which proceed from Sylhet, Assam, and Rungpore, and having a direct communication with the Bay of Bengal, this place was no doubt the centre of an extensive trade, which yielded, in the shape of customs and imposts on its merchandize, a considerable portion of the royal revenues of the Rajahs of Banga. Sir W. Jones alludes to a town situated on an island at the confluence of the Ganges and Brahmaputra, which derived its name from Laeshmi, the goddess of wealth,† and which may, therefore, be considered as identical with the Lakhi bazar of Vicramapura. There are no traces of this mart now to be seen, but from the names of several places in the vicinity of Rampal, as *Sanchacara-bazar*, or shell-cutters' bazar, *Pan-hatta*, or betel-leaf market, *Recabee-bazar*, &c. it is probable that this spot was the site of a city in former times. From the appearance which the country presents, it is further probable that this city was not built in a compact form, but consisted, like all Hindoo towns in the lower part of Bengal in ancient times, of detached groupes of houses erected on elevated portions of ground interspersed with gardens, fields, and creeks,—constituting *paras*, or separate municipal divisions assigned to people of different castes and trades.‡ Wilford refers to this locality a town, which, he says, was called Antibole by Ptolemy,

* Heeren's Asiatic Nations, Vol. III. C. II. p. 349.

† Sir W. Jones's Works, Vol. VII. p. 383.

‡ In the lower part of Bengal there appear to have been comparatively few brick buildings in ancient times. The expense of erecting durable structures of this kind must have been considerable, as the only lime that was procurable here was made from shells gathered on the drying up of the marshes in the cold season. All the very old mosques in Sonargong and Vikramapura were built with shell-lime, which from its great purity and whiteness, is said to have been made from cowries.—The houses were constructed of bamboos and straw, and in making buildings of this

and Automela by Pliny: he states that its Sanscrit name was Hastimalla, or Hathi-malla in the spoken dialects, and that both it and the country about it were called Hastibandli, because the Rajah's elephants were picketted there. (As. Res. vol. xiv. 444.) Murray places the Gangetic mart of the Periplus in the site of Chittagong.* Heeren remarks in regard to it: "at the mouth of the Ganges merchandize was conveyed to a town of the same name: situate probably in the neighbourhood of Duliapur to the south-east of Calcutta and on the central branch of the river." He quotes Mannert and adds in a note "its situation however cannot be defined with precision. It was not merely the emporium for Chinese commerce, but also for the productions of Bengal particularly fine muslins."† The articles of Chinese commerce here alluded were silk, iron, and skins from Serica, which appears to be Assam; the other exports (not the produce of Bengal) that are mentioned in the text, viz., malabathrum and spikenard—were procured, the former from Sylhet and Assam—and the latter from Rangpore. It may, therefore, be inferred from the great commercial intercourse that has long been established between these places and Dacca, that the mart through which these articles passed, was situated in the vicinity of the latter—it being contrary to probability that they should have been sent to a town on the western branch of the Ganges, while Vicramapura was the capital of the ancient kingdom of Banga, and the site, according to the traditions of the natives, of a rich mart. Was the Gangetic mart of the Periplus identical with the Gange regia of Ptolemy? With regard to the name of the latter, I may observe, that mention is made by some of the older geographers of two cities called Gange. In enumerating the mouths of the Ganges, Cellarius remarks: "Inter ostia fuit urbs Gange Ptolemœi diversa ab Artemidori Gange, modo dicta ad superiores partes hujus fluminis." The Gange Artemidori was situated above, or to the north-west of Palibothra. This appears from the account which Strabo, on the authority of Artemidorus, gives of the course of the Ganges.‡ He states that this river, on emerging from the

kind, the people of Sonargong are said to excel. They are frequently ornamented in the interior with painted reeds or bamboos and fine mats.

* Murray's *Encyclopædia of Geography*, Vol. I.

† Heeren's *Asiatic Nations*, Vol. III. p. 183.

‡ Strabo, Lib. XV. p. 719.

Himalayan mountains and entering the plains of Hindoostan, flows to the south as far as a city called Gange, and that thence it runs in an easterly direction to Palibothra and the sea. Wilford identifies it with Allahabad. Gange Ptolemaë, on the other hand, stood in Bengal, and apparently in its southern part, for it is mentioned by Ptolemy as situated near the mouths of the Ganges (*περὶ τὰ στόματα τοῦ Γάγγου*). The longitude assigned to it by Ptolemy is nearly that of the Camberichum branch of the Ganges, or the meridian of the middle part of the Gangetic Delta. The city of Tilogrammum is placed near the mouth of this river, and Gange regia about one degree farther to the north. D'Anville places Gange regia at Rajmal,* and Rennel at Gour.† Wilford in assigning a locality to it, mentions in different parts of his writings, two sites to which he refers it: the first is Satgong or Hoogly, and the second is Calcutta, supposed by him to have been anciently called Chatagram—the metropolis of a district called Gunga-Reddha.‡ Some geographers of the sixteenth and early part of the 17th centuries considered Gange regia as identical with the city of Bengala,§ which stood in the eastern part of Bengal. It seems not improbable, however, from Vicramapura having been the seat of the Gangetic mart of the Periplus, and the ancient capital of Bengal, that this place was the site of Gange regia, the capital of the Gangaridæ, whose territory comprised the country about the mouths of the Ganges, and extended, according to Curtius, beyond or to the east of that river—it being in accordance with the constant experience we have of Asia, which shows, as Heeren states, “that royal cities are always the principal depôts of inland traffic.”

The exports from the Gangetic mart were malabathrum (rendered betel in the text), spikenard, pearls, and muslins, (*οὗ οὗ φέρεται τό τε μαλάβαθρον καὶ ἡ γαγγιτικὴ νάρδος καὶ πινικὸν καὶ σινδονες αἱ διοφορώταται αἱ Γαγγιτικαὶ λεγόμεναι*.)

Malabathrum is supposed by Salmasius, Vincent, and other writers to be betel-leaf, but as the former article was imported into Rome, and as the latter is used in its fresh or green state, and is spoiled by being

* D'Anville's Ancient Geography.

† Rennell's Memoir of a Map of Hindoostan.

‡ As. Res. Vol. XIV. p. 380, and Vol. V. p. 278.

§ Vide Appendix, No. III.

transported to a distance, it is obvious that they are not identical. It has also been regarded as tea, but it is now generally admitted, as will be afterwards shown, to be the leaf of the *Cinnamomum albiflorum*, which abounds in the valleys along the foot of the hills from Sylhet to Missouri. It appears to have been prepared for exportation in the vicinity of the places where it grows, and was thence conveyed to the Gangetic mart to be shipped to the ports of Southern India.

Gangetic spikenard was so called, it is supposed, by Dr. Vincent, because it passed through the mart on the Ganges. It is the *Nardostachys Jatamansi*, a species of Valerian, which grows in Bhotan, and which was imported into the Gangetic mart from Rhandaramacotta or the modern Rungpore. Pliny mentions a variety of nard which grew on the banks of the Ganges, but as it is described by him as having a strong disagreeable taste, on which account it was designated *Ozanitis*, and as it was held in no estimation, it is not probable that it is the article referred to in the *Periplus*. Marco Polo mentions spikenard among the articles of export from Bengal in his time.

The pearls that passed through the Gangetic mart appear to have been obtained from the rivers of the eastern part of Bengal. Though small and of inferior quality, these pearls were, no doubt as much in demand among the poor, as the more valuable pearls from Perimula, Ceylon, and the Persian Gulf were among the rich. The Romans purchased pearls wherever they were to be obtained, and are said to have even invaded Britain for the sake of the pearls that are found in one of the rivers of Wales.* Robertson remarks: "Among all the articles of luxury, the Romans seem to have given the preference to pearls. Persons of every rank purchased them with eagerness; they were worn on every part of dress, and there is such a difference both in size and in value among pearls that while such as were large and of superior lustre adorned the wealthy and the great, smaller ones and of inferior quality gratified the vanity of persons in more humble stations of life."† It seems not improbable, therefore, from the ready market which pearls of every kind and quality met with at Rome, that the inferior pearls of the eastern part of Bengal were exported in ancient times. They are found in a species of muscle in the rivers and marshes of the Dacca, Tipperah, and Mymensing districts, and are collected by the Buddeahs,

* The river Conway. Vide Suetonius.

† Robertson's Ancient India, p. 58.

a vagrant gipsey tirbe, who live in boats throughout the year. They dispose of the shells, which are used for domestic purposes by the Hindoos, and sell the pearls at the annual fairs which are held in Vikramapura, Sonargong, and Bhowal. The pearls found in the present day are small, of a reddish colour, and generally of little worth, but occasionally, a pair of the value of 100 Rs. is met with; the Buddcahs sell the ordinary kind by weight to dealers in precious stones, who frequent the fairs for the purpose of purchasing them. The quantity sold by them, at the Cartick Barnee, or fair held in Vikramapura in 1841, was estimated at three thousand rupees in value; one pair was disposed of at one hundred rupees. The pearls suited for ornaments are retailed by the merchants at a price ranging from four annas to four rupees per ten pairs, and the rest are disposed of to native physicians for medicinal purposes.

The Gangetic muslins described in the text as the finest fabrics of the sort, are the fine muslins of Sonargong, and of the other places of manufacture in the district of Dacca. It may be inferred from one of the Institutes of Menu,* that the cotton manufacture was a branch of industry of considerable importance in his time, and that, therefore, the art of weaving the finest cloths was practised even in that early age. It is probable that these fabrics were exported from Sonargong from a very early period, and that they constituted the delicate vestures so frequently alluded to by Latin authors, under the names of *vestes tenues vel pellucidæ, ventus textilis, nebula*. The extreme tenuity of texture, which these terms imply, is a quality that belongs, rather to a cotton, than to a silken fabric, and leads us to conclude that the cloths so designated were the very fine transparent muslins of Dacca. The term *καρπάσος*—derived from the Sanscrit *Karpassa* or Hindec *Kapas* signifying “cotton,” was also used to designate fine muslins. It is employed by the author of the Periplus in two senses, viz. first, to denote the raw material of cotton, as when he states that the region of Membarii is fertile in Karpasos from which the Indian cloths are manufactured; and secondly, as the name of fine muslins, in which acceptation it would seem to refer to the Gangetic muslins of the text. The two Mahomedan

* Let a weaver who has received ten palas of cotton thread, give them back increased to eleven, by the rice-water and the like used in weaving; he who does otherwise shall pay a fine of ten panas. (Inst. No. 397.)

travellers of the 9th century state that cotton garments were made in the kingdom of Rami "in so extraordinary a manner that no where else was the like to be seen." The country which is here alluded to is evidently Bengal, from the circumstance of Rhinoceros' horns, Lign Aloe, and skins being mentioned as exports from it, and of shells being used as money. The cotton garments are described as being so fine, that a web might be drawn through a ring of middling size. This is a test which has been used by the Dacca weavers from time immemorial, and there can be no doubt, therefore, that the fabrics here alluded are the Dacca muslins.

The gold mine mentioned in the text appears from the words λέγεται δὲ καὶ χρυσωρύχια περὶ τοὺς τόπους εἶναι in which it is described in the original, to have been situated not exactly *in*, but rather *in the vicinity of*, the province to which the Gangetic mart belonged. The words must be considered as referring not to the alluvial plains of the Gangetic Delta, but to a country in its vicinity; and they have allusion, in all probability, to a gold mine which formerly existed in the adjacent hilly country of Tipperah. Tavernier in his account of this country remarks; "there is here a gold mine but the gold is very coarse." He also states that the gold from this mine was exported to China and exchanged there for silver. Tipperah does not produce gold in the present day, but the natives assert that it was obtained in that country in former times, and that the Kookis or hill people were in the habit of bringing it from the interior, and presenting it as tribute to the Rajah. The gold coin called Kaltis, νόμισμά τε χρυσοῦ ὁ λεγόμενος Κάλτις is supposed by Wilford, to have been the refined gold named Candan, for which India was celebrated in ancient times.* A small fragment or piece of gold of an irregular shape, having either a plain surface, or a few obscure symbols marked upon it, constituted the earliest type of a gold coin in India; specimens of this description of coins have been found in Southern India and the Sunderbunds.† As stamped coins, however, were current in India in the time of Arrian, it is probable that Kaltis was one of them. Stuckius mentions a coin called Kallais which was current in Bengal in his time. Tavernier, speaking of Tipperah, states that the Rajah "makes thin pieces of gold like to the Aspers of Turkey, of

* As. Researches, Vol. V. p. 269.

† Journal Asiatic Society, Nov. 1835. No. 47, p. 627.

which he has two sorts ; four of the one sort making a crown, and twelve of the other." The modern gold coin of Tipperah has on one side the Singha or lion resembling at the same time the Chinese dragon. The era employed is that of Salivahana, which dates 78 years later than the Christian. (See Marsden's *Numismata Orientalia*.) Kaltis, however, appears to have been the coin of the lower part of Bengal in which Gange regia was situated. The name of Sonargong, or Suvernamagrama, (the town of gold) seems to imply, that it was a place of great wealth, or what is not improbable, the appellation may have been given to it, from the large quantity of gold that was brought to it in the course of trade. Formerly, a considerable quantity of gold was imported into the eastern part of Bengal from Arracan and Pegu. Speaking of the vessel in which he sailed from the latter country to Chatigan, Cæsar Frederick remarks : " save victuals and ballast they had silver and gold and no other merchandize."* Gold is still brought annually from Pegu to Naraingunge ; and no doubt it was one of the chief imports into Sonargong in ancient times. Sonargong was the seat of a mint in the time of the Mahomedan Kings of Bengal, as appears from coins of the Sultan Shums-oddin having the word Sonargaun marked upon them, and bearing the dates 754 and 760 of the Mahomedan era.†

Khruse, which is mentioned as situated at the mouth of the Ganges, is regarded by Dr. Robertson as an imaginary island. From its being described as lying directly " under the rising sun and at the extremity of the world towards the east," Dr. Vincent identifies it with Sumatra, which is situated on the Equator, and is celebrated for its gold and tortoise shell. Khruse, it will be observed, is twice mentioned by Arrian ; first as a continent, and secondly as an island, and in both instances, as a place in the immediate vicinity of the Ganges (*κατ' αὐτὸν δὲ τὸν ποταμὸν*) : from which, it would seem that Arracan or some island off that coast, is the locality that is here referred to. Perhaps the expression " directly under the rising sun," applies merely to the situation of Khruse

* Hakluyt's *Voyages*, Vol. II. p. 370.

† Speaking of these coins Marsden states, " on four specimens belonging to the *Société Asiatique*, M. Reinaud finds the place of coinage Sonargaun (*aurificium urbs*) an ancient city on the *Brahmaputra*, and the dates 754 and 760 (*Numis. Oriental. Illustr.*)

within the torrid zone.* Arrian seems to have been aware, that Desarene and the country of the Kirrhadae and Bargoosi lay to the north of the Tropic of Cancer: and after describing these countries, therefore, he traces the course from them towards the south, and defines the intertropical position of Khruse by the expression above mentioned. Khruse was the most remote maritime region towards the east that was known in the time of Arrian, as appears from its situation being referred by him, to “the extremity of the world towards the east.” In all probability, however, it comprehended, not only Arracan, but likewise the country designed by Ptolemy, the Golden Chersonese, which is now generally admitted to be Pegu. It is likely also that it included Malacca and Sumatra.

Beyond or to the north of Khruse was situated Thina—a region the boundaries of which are mentioned as extending even to the confines of the Caspian, and the Euxine seas, the former being erroneously described according to the prevailing opinion of that time, as communicating with the Northern Ocean.† Thina appears from the geographical position assigned to it by Arrian, to have been the country called “Chin” by the Hindoos. Dr. Buchanan states that the ancient Hindoos do not mention any kingdom as intervening between Kamroop (Lower Assam) and China; and that they considered the former territory as bounded on the east by “Chin,” by which term, however, he thinks, was probably meant the country situate between the Indian and Chinese empires—China itself, he states, being, according to Abul Fazel, the Maha Chin of the Hindoos.‡ Sir Wm. Jones mentions that in the 8th century before the birth of Christ, there was erected a kingdom in the province of Shensi, the capital of which stood nearly in the 35° N. L. and about 5° west of Si-gam.§ Both this country and its metropolis were called Chin, and the dominion of its princes was gradually extended to the

* The extent of the torrid zone is differently mentioned by ancient geographers. Eratosthenes limited it to eight degrees, and Posedonius to a little more than twelve on each side of the Equator: but in general it was considered (as originally defined by Aristotle) as comprehending the portion of the earth included within the Tropics. (See Robertson’s *America*, Vol. I. p. 369, No. VIII.)

† Strabo, (Lib. XI. p. 773,) Pomponius Mela, (Lib. III. c. 5,) Pliny, (Lib. VI. c. 13.)

‡ Buchanan’s *Topography of Rungpore*. Martin’s *Eastern India*, Vol. 3, p. 403.

§ *As. Res.* Vol. II. p. 371.

east and the west. It is probable, he further states, that this nation was descended from the Chiuas of Menu—one of the ten tribes who were expelled from the caste of Kshatriyas, “for having abandoned the ordinances of the Vedas and the company of the Brahmins.” The country however, in which the Chinas of Menu originally settled, was apparently not so far distant as Shensi: for according to the same distinguished author, it is designated by the learned Hindoos, “a country to the north-east of Gour and to the east of Kamroop and Nepal”—a description which seems to imply that it is the Chin mentioned by Dr. Buchanan, and not the remote region of Maha Chin, Shensi, or China. The account given by Menu of outcast and exiled Kshatriyas, called Chinas, having emigrated to a country to the east of Bengal, is supported by a tradition current among the Koch, and I believe, also among the Meeh and Hajong tribes of Rungpore and Assam, viz., that their chiefs are descended from Kshatriyas “who had fled into Kamroop and the adjacent country of Chin.”* Both accounts are considered fabulous, but it seems not improbable that they are founded on truth, and had their origin in an incursion of military adventurers, who, on being expelled from caste, turned their arms against the barbarous tribes above mentioned. Accordingly, the Chinas and Kiratas mentioned by Menu as degraded Kshatriyas should be regarded, not as the ancestors of the aboriginal tribes of Chinas and Kiratas, as some have erroneously inferred, but as foreigners of Hindoo descent to whom the names of the tribes they conquered were given by the nation from whose society they had been exiled. Of the skill in arms of the early Brahminical conquerors of India, a highly interesting account is given in the appendix to Mr. Torrens’s work entitled “Remarks on the scope and uses of Military Literature and History.” They appear from the ancient authorities there adduced to have acquired at a very early period high military discipline and superior tactical knowledge. This military science, therefore, coupled with the physical strength which, doubtless, these warriors possessed (proceeding, as there is reason to believe they did, “from the great plateau of Central Asia”) must have rendered them formidable enemies to the comparatively weak and uncivilized aboriginal inhabitants of India. Their conquests, it may reasonably be inferred, soon extended to the fertile countries east of the Ganges; and it was, we may suppose, at no

* Buchanan’s Topography of Rungpore. See Martin’s Eastern India, p. 415.

distant period from the time they entered the plains of Hindoostan, that the two outcast or exiled classes of Kshatriyas called Chinas and Kiratas by Menu, invaded Assam and the Morung and were thence designated by the names of the uncivilized tribes whom they vanquished. The country of Chin, described as adjacent to Kamroop on the east, can be no other than the eastern part of the valley of Assam. This remote and secluded region was almost a *terra incognita* to the natives of India prior to the 17th century. Bukhtyar Khulijy invaded Assam in the 13th, and Sultan Hossein Addeen in the 15th centuries, but little information was obtained regarding it until A. D. 1660, when Aurengzebe sent an expedition to it under Meer Jumla.* Tavernier mentions, that until this time, little or nothing was known of Assam. He describes it as one of the richest and most productive countries in Asia.† His account of it and that contained in the *Alumgirnamah* of Mahomed Cazim‡ were the only sources of information whence geographers drew their descriptions of this country before the commencement of the present century. The natives of Bengal had few opportunities of becoming acquainted with Assam, prior to the conquest of it by the English Government. Strangers were denied admission into it; trade was carried on at the mountain passes leading into it, or at fixed marts on the banks of the Brahmaputra, where this river enters Bengal: and the only persons, therefore, who could give any information respecting Upper Assam were the few pilgrims who penetrated to the Brahmakund. The word Thina, the name of the country of the Thinae or Sinae, is supposed to be a corruption of Chin or Cheen, but it seems more probable that it is derived from T'hai—the name of an extensive Indo-Chinese race, which comprehends the Siamese, the Laos or Shyans, the Khamtis, and Ahom nations, that are spread over a tract of country, stretching from Upper Assam and the sources of the Irawaddee on the north, to the gulf of Siam on the south. The Thinae and Sinae mentioned by Arrian and Ptolemy are one and the same nation, and apparently the T'hai or Shyans inhabiting the extensive region above mentioned. The Ahoms of Assam are descended from the Laos or Shyans. The date of their settlement in that country is not known but there is reason to infer that it was anterior to the introduction of Buddhism into Siam. Capt. Low remarks that “the Chang priests of Assam speak a dialect of the Siamese.” He

* Stewart's History of Bengal. † Tavernier's Travels. ‡ Asiat. Res. Vol. II.

also states that "the Laos are supposed to have progressed from some northern or north-eastern region, since the Khamti bordering on Assam speak a language scarcely differing from the Siamesc."* It seems not improbable therefore that the Thinæ and Sinæ of Arrian and Ptolemy are the T'hai and Shyans. There were two capitals belonging to the Thinæ or Sinæ. Thina, the capital of the Sinæ mentioned by Arrian, and Sera, the metropolis of the Sinæ noticed by Ptolemy, are evidently, from the northern site assigned to them, the same city. Ptolemy places this city in 38° N. L. but it is probable that it stood in 28° N. L. in the vicinity of Sadiya in Upper Assam. Thinæ, the other capital of the Sinæ or Thina, is referred by Ptolemy to a situation far south, and is generally considered as having stood on the coast of Siam. The two cities, therefore, viz. the Thina of Arrian (or the Sera of Ptolemy) and the Thinæ of Ptolemy belonged—the former to the Shyans of Upper Assam, and the latter to the Shyans of Siam. Arrian speaks of the remote situation of the capital of Thina, of the difficulty there was in travelling to it, and of the few persons who came from it *ἐἰς δὲ τὴν θῖνα ταύτην ὅκ ἐστιν ευχερὴς ἀπελθεῖν σπανίως γὰρ ἀπ' αὐτῆς τινες οὐ πολλοὶ ἔρχονται*, or as Heeren renders the passage, "it is not easy to arrive at Thina and but few individuals have made the journey and returned again." This may be regarded as applying to Upper Assam. All the information, it may be presumed, which Arrian obtained regarding this rarely visited country, was afforded by maritime traders from Bengal, whom he met in the ports of Western India, and as they could only speak of it from hearsay, it cannot be a matter of surprise, considering the proneness of the natives to exaggeration in their accounts of distant countries, that he should have been led to assign to it the remote situation which is mentioned in the text, and to extend its limits to the confines of the Caspian and the Euxine seas. The city of Thina is mentioned as situated at a certain point where the exterior sea terminates; but it is at the same time stated that its site is not on the coast, but inland. The sea, which is here alluded to, appears to be the gulf of Siam. It is called the exterior sea, no doubt with reference to its position to Khruse, which was considered by Arrian as the extremity of the world towards the east. It appears to have been known to the ancients that the country of the Thinæ or Sinæ bordered at one point on the sea, long before they heard of the

* Journal of Royal As. Soc. Vol. V. p. 250.

navigation to the east of Khruise (Malacca or Sumatra). This information could only have been derived from the T'hai or Shyans inhabiting the country extending from the gulf of Siam to Upper Assam : and it was communicated, doubtless, by them to the few persons who travelled to Thina or Sera, the capital of the Sinæ for the purpose of carrying on trade. Ptolemy mentions that Marinus had heard of Cattigara, the most eastern sea port known to the ancients, (and which is supposed to have stood on the coast of Siam) but that he never met or was acquainted with any person who had made the voyage to it from the golden Chersonese.* It follows, therefore, that he obtained his information through Maës the Macedonian, whose agents carried on a trade with the Sinæ on the frontier of Serica : and that the T'hai or Shyans of Upper Assam were the channel through whom this information was conveyed. The commercial routes leading from Thina or Assam extended through Bactria to Barugaza ; also down the Ganges and thence by sea to Limurike : ἀφ' ἧς τότε ἔριον, καὶ τὸ οὐθονιον το σσηρικὸν, εἰς τὴν Βαρνυγάζαν διὰ Βάκτρων περὶ φέρεται καὶ εἰς τὴν Λιμυρικὴν πάλιν διὰ τοῦ Γάγγου ποταμοῦ. The first of these routes was viâ Thibet or Bhotan. The Thibetans formerly carried on a considerable traffic with the Assamese. A caravan consisting of about twenty persons of the former people repaired annually to the frontier of Assam, and took up their quarters at a place called Chouna, while the Assamese merchants were stationed at Gegan-shur, a few miles distant from it. The articles of merchandize brought by the Thibetans were silver bullion and rock salt, which they exchanged with the Assamese for rice, silk, lac, and articles the produce of Bengal.† This, no doubt, was one channel through which the merchandize of Thina reached Bactria. Another appears to have been through the *duwars* or passes that lead into Bhotan. Tavernier mentions that in his time merchants travelled through Bhotan to Cabul to avoid paying the duty that was levied on merchandize passing into Hindoostan viâ Gorruckpore. He describes the journey as extending over deserts and mountains covered with snow, tedious and troublesome as far as Cabul, where the caravans part, some for Great Tartary—others for Balk. At the latter place merchants of Bhotan bartered their goods.‡—The

* Ptol. Lib. 1, C. 14—Vincent, Vol. II. p. 602.

† Hamilton's Gazetteer of Hindoostan.

‡ Vide Bhotan in Tavernier's Travels.

account which is given in the Sequel would indicate that the merchandize brought from Thina or Assam to Balk or Baetria was purchased there by merchants who were proceeding or who were on their way to India—and who afterwards sailed down the Indus to Barugaza or Guzerat, where they took shipping for the Red Sea. The second route mentioned by Arrian, viz., down the Ganges and thence by sea to Limurike, no doubt refers, as Dr. Vincent supposes, to the Brahmaputra. Merchandize from Thina or Serica was brought by this channel to the Gangetic mart in the vicinity of Dacca, and was thence shipped to Limurike. It consisted of silk—raw and manufactured, skins and iron, all of which are exports from Assam or the countries bordering on it. Silk abounds in Assam and has always been an article of export from it. Mr. Hugon states that large quantities of silk cloths were formerly exported to *Lassa* by merchants known in *Derung* as the “Kampa Bhoteas,”—the quantity they used to take away was very considerable, but in the latter years of the Assam Rajah’s rule from the disorganized state of the country the number of merchants gradually decreased. He estimates the total quantity of raw silk now exported at upwards of 24,000lb. weight, and the total quantity produced in the province at more than double that weight—“the Assamese,” he observes, “generally keeping more for their own use than they sell.” It is exported principally to Berhampore and Dacca.*

The people called Sesatæ, who inhabited a country on the confines of Thina, are generally supposed from their features, and make or form, to be identical with the Besadæ of Ptolemy, placed by him, as has already been mentioned, near a range of mountains called Mœandrus. The Sesatæ are described in the text as “a wild uncivilized tribe” and as “a race of men squat and thick set, with their face broad, and their nose greatly depressed.” The words τῷ μὲν σώματι κολοβοὶ καὶ σφόδρα πλατυπρόσωποι, σιμοὶ εἰς τέλος, αὐτοὺς δὲ λέγεσθαι Σησάτας παραμοίους ἀνημέριους, of which Dr. Vincent’s translation is given above, are rendered by Heeren “a set of ill-formed, broad-faced, and flat-nosed people, who are called Sesatæ, and resemble savages.”† This is a correct description of the aboriginal tribes bordering on Assam, and there can be little doubt, therefore that the Sesatæ are one of them. All these tribes exhibit the Indo-Chinese features, and many of them have the harsh and savage-like ex-

* Journal Asiatic Soc. Vol. VI. p. 34.

† Heeren’s As. Nations.

pression of countenance, which is here mentioned as characteristic of the Sesatæ. The northern Garos are a stout, strong-limbed people, with strongly marked Chinese countenances.* The southern Garos are described as having “a surly look, a flat Caffre nose, small eyes, a wrinkled forehead, over-hanging eyebrows, with a large mouth, thick lips, and round face,”† they are stout and able-bodied men. The Khassias have the Mongolian cast of countenance, but less strongly marked, perhaps, than in some of the neighbouring tribes: they want the oblique position of the eyelids, which is so characteristic of the Chinese face, but have the flat, depressed nose. They are a strong, muscular, and active race, and are employed from childhood, both men and women, in carrying heavy burdens up and down their hills. The Cacharees, whose country is situated between Sylhet and Munipore, are scattered over several districts on the eastern frontier of Bengal. They have the Indo-Chinese features strongly marked; but they vary in stature and complexion. The Kookis of the Chittagong hills are described as “a barbarous, active, muscular race, short, of stouter and darker complexion than the Choomeas, and like them have the peculiar features of the natives of the eastern parts of Asia, namely, the flat nose, small eyes, and broad face.”‡ The Kookis of the Tipperah hills are short, broad-shouldered, but slender-limbed; they have small dark eyes, and the flat nose. The Nagas, who occupy the ranges of hills on the southern side of Assam are distinguished by the peculiar features of the Chinese. The Kookis (or Lunctas) and the Nagas appear to be amongst the most uncivilized of all the hill tribes of eastern India. They devour animal food in its most disgusting forms, as the flesh of elephants, tigers, jackals and snakes. I have already mentioned the Kookis of the Tipperah hills as being apparently identical with the Padæi of Herodotus. The Kookis of the Chittagong hills are also cannibals. Many of the Naga tribes go naked, and hence the appellation of Naga derived from the Sanscrit, which is given to them. Ptolemy mentions them under this name, viz., “Nangalogœ quod significat mundum nudorum.”§ The Koch are an aboriginal tribe, who occupy the low country in the Rungpore district, skirting Assam and Bhotan: they are also found in the Mymensing and Daeca districts. They are a strong race of men, possessing the broad outlines of the Tartar countenance: they live in

* As. Res. Vol.—

† As. Res. Vol.—

‡ Ptol. Lib.—

the heart of the forests, where they cultivate patches of ground with the hoe : they raise cotton, and kill elephants and deer for the sake of their tusks and horns which they bring for sale to the weekly markets, held on the borders of their forests. The Koch, who inhabit the forests in the northern part of the Dacca district, are altogether a much stouter and more hardy race, than the Hindoos or Mahomedans in the neighbourhood. They live in the midst of the forests of Bhowal, Cossimpore, and Atteya, and notwithstanding the unhealthy state of this part of the country, they suffer much less from malaria, than the other inhabitants in the same part of the district. With the axe and hoe they clear away the jungle, and cultivate rice, oil-seeds, and cotton, which they sell or barter at the weekly markets held in the vicinity of the forest. They often suddenly vacate their locations, and the land they have brought into cultivation, and move into the interior, where they recommence their labour of clearing away the jungle. They live in small villages consisting of a few huts frequently situated at a considerable distance from each other. They eat animal food and drink spirits, and from this mode of living they possess considerable physical strength, and armed with spears do not hesitate to attack on foot, wild elephants and tigers. They are strictly honest and faithful in all their dealings, and have the virtue, which few of their neighbours possess, of paying a great regard to truth. They are of a taciturn and reserved disposition. These tribes have different languages, and are in the practice of carrying on traffic with the Bengalese and Assamese, through the medium of persons, who act as interpreters and brokers at the marts they visit. Many of them, however, can speak the Bengalee language and barter their goods themselves. In former times, the intercourse between the aboriginal tribes and the civilized people of the plains was much less frequent, than it is in the present day. The hill men accompanied by their wives and children generally travelled in large bodies to the marts or *hauts* on the frontier : and on their arrival there, they held no direct communication with the people of the plains, but sold their goods, either through interpreters, or by means of signs—both parties keeping at a distance from each other during the negotiation. I have been informed by some old native merchants of Dacca, who formerly carried on trade in Tipperah, that before the Company's Government was established in that district, the Kookis from the oppression and injustice which they suffered from

the people of the plains, were in the habit of bartering their goods in this manner. A similar practice, though arising apparently from a different cause, occurs in Malabar. Speaking of the tribe called Nayaree in that country, Col. Welsh states : " They crawl to the road side or to a certain distance from a habitation, deposit something, such as a bundle of twigs, some wild berries or a honey-comb, set up a loud and hideous shriek or scream, and then retire to a sufficient distance to watch the result, when the nearest person either converses with them at a distance on the exchange, or at once deposits what may serve their purpose, and get out of the way to enable them to approach, and carry off their supplies without personal contact."* The Garos and Kookis bring down to the plains large basket loads of cotton, which they exchange for rice, dry-fish, betel-nut, salt, goats, poultry, ornaments, &c. Speaking of the former people and the places where they carry on traffic, Dr. Buchanan remarks : " They repair once a week during the dry season, more particularly in December, January, and February. Almost the only article which they bring for sale is cotton in the seed, for the conduct of the Bengalees has totally put a stop to the collection of Agal-wood. On the Garos arriving at the market the Zemindar in the first place takes a part of the cotton as his share (Phul) ; the remainder is exchanged for salt, kine, hogs, goats, dogs, cats, fowls, ducks, fish, dry and fresh, tortoises, rice and extract of sugar-cane for eating : for tobacco and betel-nut for chewing, &c." The Khassias bring to the mart on the borders of their country, cotton, iron ore, honey, wax, oranges, ivory, and cassia, and sell or exchange them for spirits, rice, tobacco, fish, &c. They and all the other hill tribes on the eastern frontier of Bengal, carry down their goods in large conical-shaped baskets, or hampers, called *tapas* by the Khasias. This kind of basket is made of ratan or bamboo, and is supported upon the back by means of a broad band which encircles the forehead. Men and women carry heavy loads of goods to the plains in this manner. The account, which is given of the Sesatæ coming to an established mart on the borders of Thina accompanied by their wives and children, and carrying heavy burdens in mats, so closely resembles the description which is given of the hill people of Assam and their mode of conducting traffic as to leave no doubt, I think, that the Sesatæ are one of these tribes,—*παρά-γίνονται σὺν γυναῖξιν καὶ τέκνοις βασάζοντες φορτία μεγάλα ἐν ταρπόναις, ἀμαμπέλι-*

* Welsh's Military Reminiscences, Vol. II. p. 111.

νων παραπλήσια. The word *ταρπόναις* is supposed by Dr. Vincent to signify *sirpeis*, rendered mats made of rushes, bags or sacs. It is more probable, however, that *tarponais* is a corruption of *tapas*, and that it refers to the baskets in which the hill people carry down their merchandize to the plains. Though both Vincent and Heceren have rendered the words *ταρπόναις ὠμαμπελίνων παραπλήσια*, mats resembling in their outward appearance the early leaves of the vine, or looking like the early branches of the vine, yet they consider *ωμαμπελινων* to refer, not to the material of which the mats were made, but to the articles contained in them, and which are supposed by them to have been the betel-leaf and areca nut, from which malabathrum was prepared. Malabathrum, however, is not betel-leaf nor areca nut, but the leaves of two or more species of *Cinnamomum* which are found in the valleys along the foot of the hills on the eastern frontier of Bengal. These trees bear fruit of the shape of a small oval drupe or berry, about the size of a black currant, and it is apparently to the resemblance between this fruit and a young or early grape, that the word *ωμαμπελινων* is applied, as signifying, *like the early fruit of the vine*.

The *Sesatæ* accompanied by their wives and children brought in their *tarponais* or baskets, large loads or burthens, (*φορτία μεγάλα*) of the branches of these trees, from the valleys in the interior, and bartered them at the marts or *hauts* on the borders of their forests, for the produce of the plains. It is mentioned that they held a feast or festival at the mart, or in other words, they feasted on the articles of food, &c. which they received in exchange for their merchandize. The barter was, no doubt, effected either by signs, or through persons, who, understanding their language, acted as brokers on behalf of the *Thinæ* or people of the plains of Assam. This is probable from the circumstance of its being mentioned that the *Thinæ* “continued on the watch,” while the *Sesatæ* were at the mart. The *Thinæ* or Assamese merchants appear to have entrusted the negotiation of their business to interpreters, while they themselves remained at some distance watching the proceedings.

The *Sesatæ* having completed the barter, and feasted for several days on the commodities they received, took their departure for their own country in the interior; or in other words, they returned to the jungles of their mountain recesses; after which, the *Thinæ*, coming forth from their place of retreat, repaired to the spot, and collected the baskets of

goods, which the strangers (the Sesatæ) had left behind them, (οἱ δὲ ταῦτα δοκοῦντες τότε παραγίνονται ἐπὶ τοὺς τόπους καὶ συλλέγουσι τὰ ἐκείνων ὑποσώματα.) Whether the Sesatæ brought any merchandize besides the article which is described as ὠμαμπελίνων παραπλήσια does not appear from the text. This is the only thing that is there specified; and from it, the Thinaë or the Assamese merchants proceeded to prepare the two articles called Petros and Malabathrum. The words, that refer to the former article, are in the original ἐξινιάσαντες καλάμους τοὺς λεγομένους πέτρους. Dr. Vincent supposes that they apply to betel, and that the first part of the sentence, which he renders "they pick out the haulm which is called Petros," is descriptive of the process of picking out the nerves or central fibres of the leaf of the Piper Betel, called in the preceding part of the text, from the resemblance between it and the vine, —ὠμαμπελίνων; while he regards the rest of the sentence as having reference to the folding of these leaves with areca or betel-nut, cardamoms, lime, and other adjuncts, into balls, or rather small parcels, which, he concludes, constituted the masticatory called Malabathrum in the text. He is of opinion that the betel leaf and areca nut were procured from Arracan, which he identifies with the country of the Kirrhadæ, celebrated for its Malabathrum, and that the Sesatæ, whom he supposes to have been the Tartars of Lassa, were the carriers of this article along with other merchandize from that country to the frontier of China. Dr. Vincent's interpretation, however, fails to explain the circumstances which are connected with the manufacture and ultimate disposal of this article of traffic; and is not reconcileable with the text. The Sesatæ are there represented as bringing the article described by the word ὠμαμπελίνων, from which Petros and Malabathrum were made, from their own country to a mart on its border; as bartering it for articles on which they kept a feast for several days; and as then returning to their country in the interior. Their neighbours, the Thinaë, then prepared the substances of Petros and Malabathrum, and brought them to India. The supposition that the Thinaë are the people of the valley of Assam, and the Sesatæ one of the aboriginal tribes bordering on that country, is in accordance with the statements of the text. Dr. Vincent, on the other hand, represents the Sesatæ or Tartars of Lassa as bringing the articles from which Petros and Malabathrum were formed, from a distant foreign country (Arracan) to the frontier of China. But, indepen-

dently of this being opposed to the text, it is difficult to comprehend why betel-leaf and areca nut should be carried to so great a distance for the mere purpose of being made into balls, and afterwards brought back to India under the name of Malabathrum, as is there mentioned. Wilford gives a very different interpretation of this passage of the Sequel. He supposes that Malabathrum is a kind of tea, which is prepared in the form of balls, and sold at some of the frontier towns of Ava, Assam, and Laos. He considers the Sesatæ as identical with a gipsey tribe called Besadæ, who are hucksters by trade, and who, in this capacity, frequent the different fairs throughout the country. The Besatæ, he supposes, made small baskets of certain leaves as large as those of the vine, which they sewed together with the fibres of the bamboo: and then filled with leaves of a certain plant rolled into balls, which were of three sorts according to the quality and size of the leaves. The Petros of the text, he supposes to be the leaf of the Dhac tree (*Butea frondosa*) which is used all over India to make baskets, and which are fastened with skewers from the fibres of the bamboo. According to this interpretation, malabathrum or tea, was sold by the Thinæ or Chinese to the Sesatæ or Besatæ, who brought it into India for sale. But the reverse of this is stated in the text, viz., that the Sesatæ brought the article of which Malabathrum was formed from the interior of *their country*, and sold it to the Thinæ, who made it into balls which *they* (the Thinæ) conveyed into India.

Petros and Malabathrum consisted neither of betel nor tea, but of different parts of the trees yielding Tejpatria and Cassia Lignea. The former is the *bark*, and the latter are the *leaves* of one or more species of trees of the genus Cinnamomum. That Malabathrum is identical with Cinnamomum albiflorum is established by the fact, that Saduj is the name which is given to Malabathrum in the writings of the Arabs, while Saduj is applied in Persian works to Tejpatria or Tejpata, which is the Cinnamomum of Botanists. "Malatroon," says Royle, "is assigned as the Greek name in Persian Materia Medica." Cinnamomum albiflorum is also designated Tuj and Patruj* in Hindoostan—the former name being generally applied to the *leaf*, and the latter to the *bark* of the tree. Tuj, Tejpata, or Tejpatria, by all of which names this leaf is known, is used as

* Royle's Illustrations of Botany of the Himalayan Mountains, p. 325. Dr. Butler's Topography of Oude, p. 43.

a condiment in all parts of India. It is indigenous in Sylhet, Assam, Rungpore, and in the valleys along the base of the mountain range, as far as Mussouri. The dry branches and leaves are brought annually in large quantities from the former place, and sold at a fair which is held in Vicramapura, close to the supposed site of the Gangetic mart of the Sequel. Tuj, however, is a name that is also given in the eastern part of Bengal, to the *bark* of a variety of *Cinnamomum Zeylanicum*, or *Cassia lignea*, which abounds in the valleys of Cachar, Jyntea, and Assam. Mr. Landers describes *Cassia lignea*, as indigenous and growing luxuriantly, along the second range of the Naga hills in Assam, as plentiful at Tublong, Chackting, and Nokangies, and as an article that is brought to the plains by the Abor tribes of Yung-yack, Tangsee, and Tamlow.* It is prepared and sold by the Khassias in the Cherra Poonjee bazar, whence it is exported to Sylhet, Dacca, and other marts in the eastern part of Bengal. Moghul merchants repair to the former place for the express purpose of purchasing cinnamon. As Tuj, therefore, is an appellation that is applied to *Cinnamomum albiflorum*, and *Cassia lignea*, so Patruj, which is the name of the bark of the former, may, in like manner, have been used in ancient times, to designate the quills of the bark of the latter tree. It is probable, therefore, that the words, *ἐξινιάσαντες καλάμους τοὺς λεγομένους πέτρος*, refer to the bark of *C. Zeylanicum* or *Cassia lignea*; and therefore, instead of signifying “they pick out the haulm which is called Petros” as they are translated by Dr. Vincent, they should be rendered *they peel the pipes or quills [or the bark] called Petros*;—*καλάμους* having reference to the tubular or hollow cylindrical form, which the bark of cinnamon assumes in drying, and *πετρος* being a corruption of Patraj or Putruj, the name of the bark of *Cinnamomum albiflorum*, and no doubt, formerly also that of *Cassia lignea*. The account, which is given in the Sequel regarding the mode of preparing Petros and Malabathrum, seems to imply that the Sesatæ brought the green branches of the *Cinnamomum albiflorum*, and *Cassia lignea* trees, from the forests in the interior of their country, to the marts on the frontier, and sold them there to the Thinae or Assamese, who peeled the bark called Petros. This, probably, was done after the ripening of the fruit, which is considered the best season for peeling the bark of the Cinnamon or Cassia tree: and it is, apparently, to this

* Journal of the Agricultural and Horticultural Society of India, Vol. II. No. X.

circumstance, viz., to the branches having the fruit on them, when brought for sale, that Arrian alludes when he describes them by the term *ώμαπελίνων*, or in other words, as being in external appearance, like the early fruit of the vine. The Thinae or Assamese having peeled the branches of the Cassia tree [literally the quills or pipes called Petros] proceeded next to prepare Malabathrum. For this purpose they picked the leaves, and folding them double, they rolled them into small balls and passed a cord or string, made of the fibres of the bark through them *ἐπίλεπτον ἐπιδιπλώσαντες τὰ φύλλα καὶ σφαιροειδῇ ποιοῦντες, διείρουσι ἀπὸ τῶν καλάμων ἴναις*. These balls, which appear to have consisted each of a single leaf, were made of three sorts, which were designated according to their size, the large, the middle-sized, and the small *γίνεται δὲ γένη τρία ἐκ μὲν τοῦ μέγιστος φύλλον, τὸ ἀδρόσφαιρον μαλάβαθρον λεγόμενον. ἐκ δὲ τοῦ υποδεεσερον, τὸ μεσόσφαιρον, ἐκ δὲ μικροτερου το μικροσφαιρον*—a distinction which seems to indicate that three varieties or species of the genus *Cinnamomum*, differing from each other, in the size of the leaf, or in the strength of its aromatic flavor, were used for the preparation of Malabathrum. Dr. Buchanan has described three species of Tejpata, and it is probable that the three kinds of Malabathrum, here referred to, consisted of the *Cinnamomum Albiflorum*, the *Cinnamomum Tamala*, and the *Cinnamomum Zeylanicum*.* The term Malabathrum is generally supposed to be a compound of *Tamala* (one of the Sanserit names of *C. albiflorum*) and *putra* (a leaf):—the original word *Tamalapatra* having been corrupted by Greek and Latin writers into *μαλάβαθρον*, and this again into Malabathrum. Garcias first suggested this as its probable derivation: “Appellant autem Indi, Folium Tamalapatra quam vocem Græci ad Latini imitantes corrupte Malabathrum nuncuparunt.” It has been conjectured by others, that Malabathrum is derived from “Malabar,” and the word “bathrum,” which is supposed to have been the name given to betel in that province. “Ferunt apud Indos nasci in ea regione quæ Malabar dicitur: vernacula ipsorum lingua bathrum sive bethrum appellari inde Græcos composita voce nominasse.” (H. Stephani Thesaurus Linguae Græcæ, Vol. IV. 1412.) It is very evident, however, that this cannot be regarded as the origin of the term, for it is stated in the Periplus, that the name was given to the article on the confines of Thina where it was obtained, and

* Dr. Buchanan has described several species of Malabathrum leaf or Tejpata. (See Trans. Linnean Soc. Vol. XIII. p. 556.)

that under this designation, it was brought into India by those who prepared it. It is more probable, that Malabathrum is derived from the Sanscrit words *mala* (a garland) and *putra* (a leaf); the compound *malapatra*, which is thus formed, and which signifies a garland or string of leaves, having been subsequently corrupted into *μαλάβαθρον* or Malabathrum. This etymology of the term, indeed, is indicated by the details given in the text regarding the mode of preparing Malabathrum; for it is there mentioned, that the leaves were made into balls, and that the fibres of the plant were passed through them; “that in this form” the article took the name of Malabathrum: and that “under this denomination,” it was brought [from the confines of Thina or borders of Assam] into India, by those who prepared it. The name, it will be observed, was not given to the leaves in their original state, or the state in which they were brought by the Sesatæ from the forests in the interior; but was applied to them after they had undergone a certain manipulation, viz., when made into small balls, and strung together on the fibres of the plant, in the form of a garland or a thread of beads. This mode of preparing the leaves of the Cinnamon or Cassia tree appears to have been adopted in order to preserve the aromatic-stimulant properties of Malabathrum during its transportation to distant countries. The small balls, of which Malabathrum consisted, were each composed of a single leaf (the *Pilulæ Malabathri* of the older commentators), and were used as a masticatory. That Malabathrum was applied to this purpose, is stated in the text; and, that it was so used by the Greeks and Romans, is tolerably certain from the remarks which are made regarding it by ancient authors. Dioscorides states that it was placed under the tongue to purify the breath; and that it was a tonic to the stomach: *υποτίθεται δὲ τῇ γλώσση πρὸς ἐνυδρίαν σώματος*. Pliny also ascribes the former property to it: “*sapor ejus nardo similis esse debet sub lingua oris et halitus suavitatem commendat linguæ subditum folium.*” Eastern India appears to have furnished the greater portion, if not the whole, of the Malabathrum that was imported by the ancients. Though *Cinnamomum albiflorum* is indigenous in Malabar, and Coromandel, yet no mention is made of Malabathrum having been prepared from it in these countries. This article together with others is noticed as an import into Nelkunda on the Malabar coast, from countries farther to the east,† *ἐλέφας καὶ ὀθόνια σηρικὰ*

* Pliny. Lib. XXIII. Chap. 48. † Vincent's *Periplus of the Erythrean Sea*, p. 462.

καὶ νάρδος ἡ γαπωνικὴ (rendered γαγγίπκη) καὶ μαλαβαθρον ἐκ τῶν ἔσω τόπων. The articles of merchandize here mentioned are the productions of Eastern India, and were, no doubt, exported from the Gangetic mart. Malabathrum appears to have been shipped to Nelkunda, Limurike, and the other ports of Southern India, and was thence exported to the countries bordering on the Mediterranean, where it was known by various names, besides that of Malabathrum, as φύλλον ινδικον—σφαιρία μαλαβαθρον—φύλλον κατασφαιρον*—Herba Paradisii—Folium—appellations which refer to the country where it was produced, the form of its preparation, and the high estimation in which it was held by the ancients. Malabathrum, besides being used as a masticatory, constituted an ingredient in the Mithridatic antidote,† and in the Theraica; it was also infused or macerated in wine, and was employed as an aromatic and tonic. The leaves and bark of Cassia lignea yield an essential oil, which enters into the composition of many of the odoriferous oils which are prepared by the natives of India. It is extracted by boiling the bark of Tuj with a quantity of fixed oil and water, during which process, the essential becomes incorporated with the fixed oil, to which it imparts its odour.

The Romans were in the habit of preparing this perfume by macerating both the leaf φύλλον, and the wood or bark ξυλοφύλλον, in fixed oil in the manner which is practised by the natives. It is probable, however, that the leaves of other Indian plants, besides those of the Cinnamon and Cassia trees, were imported into Rome under the name of Malabathrum, for the purpose of being used in perfumes or ointments. Dioscorides describes Malabathrum as a plant found growing without roots on the surface of marshes, and remarks that it is by feeding on its leaves that the Onychia becomes aromatic. Pliny states that this kind of Malabathrum is more odoriferous than saffron: that it is of a black colour: rough to the touch, and of a salt taste: and that its flavor ought to resemble that of Nard. He adds that the perfume which Malabathrum or *the leaf* yields, when it is boiled in wine surpasses all others.‡ Malabathrum, in all probability, was a generic term, which was applied to leaves of different plants rolled up in the manner which is described in the text, and it may, therefore, be regarded as the name,

* Art. Malabathrum et Foliatum. Lexicon Universale, Hoffman, A. D. 1698.

† Vide Celsus de Medicina, Lib. V. Chap. XXIII.

‡ Pliny. Lib. XII. C. XXVI.

not of a particular plant, but of *a mode of preparing leaves* which was adopted to preserve their odoriferous and aromatic qualities. The masticatory called Malabathrum consisted solely of the leaves of the Tejpatra; but the perfume, which was designated by the same name, appears to have been prepared from other plants, besides the leaves and wood of Cassia. The unguent of this name was manufactured and sold at Rome by a class of persons who, from the trade or business they followed, were called Malabathrarii (Malabathrarii vocabantur unguentarii qui malabathrum unguentum pretiosissimum vendebant.) (Plaut. Aul. III. 5. 37.)*

Arrian concludes his narrative by stating that all the regions beyond Thina were unexplored, either on account of the severe frosts and the difficulties of travelling, or because it was perhaps the will of the gods to fix these limits to the curiosity of man. This account seems to refer to the region of Uttara-Cura which is described by the Hindoos as inaccessible to the steps of man, and to the rays of the sun. The name was applied to the north-eastern portion of the Himalayan mountains; and according to Professor Wilson, this region appears to be the north-eastern part of Assam, designated by Ptolemy—Ottorocaras, and by Ammianus Marcellinus—Opurrocarra. The lofty mountains, which bound the eastern extremity of this valley, belong to the Himalayan range, and are, it is calculated, about 8000 feet in height.

The country of the Seres is the Thina of Arrian, which I have endeavoured to identify with Assam. The name of Seres appears to have been applied both to the inhabitants of the valley of Assam and to the hill tribes bordering on it, and hence the Seres of some authors are the Sesatæ of the Sequel to the Periplus.

Pomponius Mela mentions the country of the Seres as situated between India and Scythia, and describes them as a people celebrated for their justice. "They have become known to us," says he, "by their commerce, for they leave their merchandize in the desert and then retire till the merchants they deal with, have left a price or barter for the amount which, upon their departure, the Seres return and take."† The

* Syrian Malabathrum was that imported into Europe viâ Syria "ex India in Syriam (unde Syriaci cognomen) inde in Europam adferebantur." Lexicon Universale, Hoffm. Art. Malabathrum.

† De situ orbis. Pomp. Melac, Lib. III. C. VII.

mode of conducting traffic which is here described is so similar to that mentioned in the Sequel, that there cannot be a doubt, I think, that the Seres and Sesatæ are identical. Justice, which is mentioned by Pomponius Mela as a characteristic of the Seres, means here, honesty in carrying on traffic, and a strict regard for truth—virtues which all the hill tribes on the eastern frontier of Bengal have the character of possessing in an eminent degree. The desert is the jungle or forest (*aruni*) at the foot of the hills, where the hill people barter their goods to the merchants of the plains.

Pliny gives a similar description of the Seres. He states that they are a quiet, and inoffensive people, but that they resemble wild beasts in one respect, namely, that they flee from the sight of men, or rather that they shun intercourse or personal communication with other people, though they are at the same time desirous of carrying on traffic with them.* This, no doubt, refers to the caution and reserve which the hill tribes have always exhibited in their traffic with the people of the plains. Pliny also mentions the Seres as celebrated for silk which their woods produced. In speaking of the embassy from Ceylon to the emperor Claudius, he represents the chief ambassador as stating that they (the people of Ceylon) knew the Seres through the medium or channel of trade, and that his (the ambassador's) father, by name Rachia, had often visited them. He informed the emperor that if strangers approached the country of the Seres, they incurred the risk of being assailed by wild beasts—a remark, which seems to imply, that there was a dense jungle infested with beasts of prey on the frontier of Serica, and that it was dangerous for persons unacquainted with the paths or roads through it to travel to Serica. The Seres are described by the ambassador as giants or people exceeding the ordinary stature of men, as having red hair, and blue eyes, and as speaking an unintelligible language, which rendered it difficult to carry on trade with them.† Pliny mentions that the first river in the country of the Seres was called Psitaras (the Tistha in Rungpore?), and that in carrying on traffic with them, the merchants placed their merchandize on the farther side of the river. If the Seres wished to barter, they took the goods which were there deposited, and left the commodities which the foreign merchants wanted in exchange. The people referred to by the ambassador

* Pliny. Lib. VI. C. XVII.

† Ibid. Lib. VI. C. XXII.

appear to be the Bhotiyas, who are a tall race of men, and who probably dyed their hair of a red colour. According to Klaproth,* the ancient Tibetans called Khiang, who were of the Bhotiyah race, painted their faces of a red colour. The Bhotiyas repair to the great fair held annually in the Rungpore district, and it was probably here that Rachia, the ambassador's father, saw them. Pliny himself, in describing the Seres, seems to allude to the aboriginal tribes of Rungpore bordering on Assam. The forests of their country produced silk (*tassar*) which was bartered on the banks of a river described as the first in their territory, and which was perhaps the frontier between Bengal and Assam. The barter was carried on in the manner mentioned by Arrian and Pomponius Mela.

Pausanias mentions two nations of the Seres. Holwell in his Dictionary extracted from "Bryant's Analysis of Ancient Mythology" states: "Pausanias (L. 6. p. 519.) describes two nations of the Seres who were of an Ethiopic, Indic and Sythic family. The first was upon the Ganges, the other region of the Seres is the same with China, and lies opposite to the island of Japan, called by Pausanias Abasa and Sacaia." The Ethiopic and Indic Seres here mentioned are the hill tribes and the people of the valley of Assam. The term *Ethiopic* was applied to the former from the similarity of some of their features to those of the Negro race. Megasthenes compares the inhabitants of India with the Ethiopians. Sir William Jones also remarks, "that the mountaineers of Bengal and Behar can hardly be distinguished in some of their features, particularly in their lips and noses, from the modern Abyssinians;"—a fact which he adduces in confirmation of the opinion that Ethiopia and Hindoostan were peopled or colonized by negroes.† The *Indic* Seres, on the other hand, were a people who occupied the lower or western part of the valley next to the Ganges, and who consisted of the descendants of the early Hindoo invaders of the country and of the aboriginal inhabitants of the plains. The *Scythic* Seres may be regarded as the Thinæ or Sinæ who occupied Upper Assam and the region extending to the gulf of Siam, opposite to which was the island of Abasa or Sacaia, which is apparently Java.

The ἔθνεα βαρβαρα Σηρῶν of Dionysius‡ are the Sesatæ of Arrian, or some kindred uncivilized hill tribe bordering on Assam. He describes

* Nouv. Journal Asiatique, Tom. 4, p. 104.

† As. Res. Vol. I. p. 427.

‡ Orb. Descript. V. 752.

them as possessing neither flocks nor herds, but as employed in gathering from the flowers of the desert, a substance that was carded and woven into precious or costly fabrics, which surpassed in the variety and richness of their colors the mingled beauties of the enameled mead, and which rivalled in their delicate texture, even the fineness of the spider's web. The material here referred to, is *tassar* or *moonga* silk, which abounds in the forests or jungles of Assam (the desert *aruni* mentioned in the text), and the rich and varied colours that are mentioned, were no doubt, imparted to it by the indigenous dyes of Assam, namely, *lac*, *room*, *manjit*, and *mismee-titā*, which give the beautiful red and blue colours with which the silks of that country are prepared in the present day.

The Schiratæ or Siratæ of Elian are evidently the Ethiopic Seres of Pausanius, or the Sesatæ of the Sequel. They are mentioned as a people with flat noses, situated in *India ultra Gangem*—in whose country there were serpents of an enormous size (Boa or python tigris) that devoured cattle. Sir. W. Jones regards the country of the Siratæ of Elian as identical with Sylhet, Siret or Srihaut, a place, which he states, was celebrated among the ancients for the fragrant essence extracted from Malabathrum.* The Seres mentioned by Horace,

“ Doctus sagittas tendere Sericas
Arcu paterno ?——— ”

Hor. Lib. i. 29.

are the mountain tribes bordering on Assam, all of whom are expert at the use of the bow and arrow.

The Seres are mentioned by ancient writers as a people who are remarkable for their longevity. They were said to live to the age of two hundred years. Ctesias and Elian state that the fruit of a tree called Siptachora, from which amber exuded, and upon which there was found a small insect yielding a purple dye, possessed the virtue of prolonging life to the same number of years. It would seem from this circumstance that the Seres inhabited the country in which the Siptachora grew, and as there can be no doubt that the insect alluded to is the lac insect, it may be concluded that Lower Assam is the region which is here referred to. This is rendered the more probable from the account which Ctesias gives of this country. Wilford mentions that Ctesias (accord-

* Works of Sir W. Jones, Vol. VI. p. 384.

ing to a passage in the Bibliotheca of Photius) gives the name of Hyparcho to the river which proceeded from the country whence the Sip-tachora was brought. "The mountains abound with trees hanging over the numerous streams which flow through them. Once a year during thirty days tears flow plentifully from them, which falling into the waters beneath coagulate into Amber. These trees, the Hindoos call Sipa-chora. In the country about the sources of this river there is a flower of a purple color which gives a dye, not inferior to the Grecian, but even much brighter. There is also an insect living upon these amber-bearing trees the fruit of which they eat, and with these insects bruised, they dye stuffs, for close vestures, and long gowns of a purple colour superior to the Persian. These mountaineers having collected the amber and the prepared materials of the purple dye, carry the whole on board of boats with the dried fruit of the tree, which is good to eat, and then convey their goods by water to different parts of India. A great quantity they carry to the emperor (the king of Magad'ha) to the amount of about one thousand talents. In return they take bread, meal, and coarse cloth. They sell also their swords, bows and arrows."* Assam appears to be the country which is here referred to by Ctesias. Lower Assam abounds in *lac*, while *munjit*, *mishmi-tita* and *room*, which are found in Upper Assam, are apparently the dyes that are mentioned, as produced about the sources of the river Hyparcho. Room is a species of *Ruellia*, of the family of *Acanthacea*. Dr. Griffiths states, that with it the deep blue cloths of the Kamptis and Singphos are dyed; he calls it "a valuable dye and highly worthy of attention."† According to Ctesias the term ὑπαρχος "Hyparcho," the name that was given to the river proceeding from the country in which the σιπταχώρα grew, means φέρων πάντα τὰ ἀγαθὰ, i. e. "producing all good things."‡ This must have reference to the valuable merchandize consisting of silk, lac, and other dyes, lign aloe, musk, ivory, gold, silver, and steel, which were exported to India, viâ the Brahmaputra.§

Strabo mentions that the Seres formed a republic or commonwealth;

* Wilford's Essay on Anugangam. As. Res. Vol. IX. p. 65.

† Journal of Asiatic Society.

‡ Heeren's As. Nations, Vol. II. Appendix, IV. p. 380

§ Amber is still found in the north-eastern parts of Assam in considerable quantities, or rather between Assam and Burmah.

and that it was governed by a council of five thousand persons, every one of whom found or provided an elephant for the use of the State. “Nam Seres tam longæ dicuntur vitæ ut ducentessimum annum excedant. Ferunt etiam quendam optimatum ordinem rempublicam gubernare ex quinque millibus consiliorum constantem, quorum quisque elephantem reipublicæ præbeat.” (Strabo, Latin text, p. 702.) This seems to have reference to the Raj corporations of Assam. Major Fisher remarks: “the most ancient form of tenure by which land was held in Assam was under a grant from the prince addressed to a body of proprietors, who were erected into a corporation called a Raj, and who possessed the land on terms by which they were bound each for the other and for the whole estate. The proprietors of land in every Raj were classified according as they paid revenue to the prince direct, or to some one in whose favour an assignment was made. The Raj was entrusted with the local administration of affairs and transacted business in periodical meetings.”* It is probable that the council of five thousand, which Strabo mentions, consisted of the heads or chiefs of these corporations, and that each Raj was bound to provide an elephant for the service of the State. The circumstance of the country of the Seres furnishing the number of elephants here specified is, of itself, sufficient to identify Serica with Assam. There is no other country in the situation assigned to Serica, namely, on the north of *India extra Gangem* and of *Sina* or Siam, than Assam, that abounds in elephants, and it may, therefore, be inferred from this fact, coupled with the accounts of other ancient writers, who describe Serica as an extensive and fertile valley watered by large rivers, and abounding in silk, that Assam is the country that is here referred to. It is estimated that upwards of 700 elephants are exported annually from Assam: many also are killed for the sake of their tusks.

Ptolemy describes the Seres and Sinæ as contiguous nations. India extra Gangem, which comprised Arracan, Pegu, and Ava,—constituting the *Argentea regio* and *Aurea Chersonesus* of Ptolemy—is mentioned by him, as being divided from the country of the Sinæ by a line commencing at the extremity of Serica, and extending through the middle of the great bay (*Sinus Magnus*) on the south.

The country of the Sinæ therefore was adjacent on the west to India

* Journal of Asiatic Society, No. 104.

extra Gangem. It is described as bounded by unknown regions on the east, by the sea on the south, and by Serica on the north. The Sinæ appear to have been the ancestors of the modern Siamese, of the Shyans of Laos, and other adjoining States, and of the Ahoms of Assam. The Siamese, who are a branch of the Laos, separated from them A. D. 813. The Laos civil era, or that of the introduction of Buddhism into that country, commenced A. D. 638.* The Shyan chronicle preserved in Munipore states that the ancient territory of the Shyans was called Pong, and that it constituted a kingdom, the capital of which was Mogaung or Mongmaorong, as it is called by the Shyans. Their first king, named Khool-lee, reigned in the 80th year of the Christian era. Chukapha, the first Ahom king of Assam, of whom there is any authentic information extant, reigned in the 13th century. It appears, however, from this chronicle, that some centuries anterior to this, Assam was invaded by Samlongpha and placed by him under the dominion of his brother Sukampha, king of Pong. This is said to have occurred about the year A. D. 77.† It has been discovered that there are no traces or mention of Buddhism in the religion of the Ahoms, and it is therefore, inferred, that they emigrated to Assam before A. D. 638, the era of the introduction of the Buddhist faith into Laos.‡ This circumstance, coupled with the fact of the Ahoms having a list of the names of forty-eight kings descending from the god Indra down to Chukapha, renders it probable that they were in possession of Upper Assam at an early period, or as far back, at least, as the second century—the era in which Arrian and Ptolemy wrote. The name of Thai, which signifies “free,” is supposed by Capt. Low to have been assumed by the Siamese at the time they separated from the Laos. It seems not improbable, however, that it is of more remote origin, and that Thai is the root of Thinæ, while Shyan is that of Sinæ—the names by which the inhabitants of the Laos and Siamese territories were known to the ancients. Thai Nai, it may be remarked, is an appellation which is given to the central Siamese, and Thinee appears as the name of a town in 23° N. L. 98° E. L. in the territory of the Shyans dependent on Ava. The Laos also called their country “Chi Mai,” signifying “Priests’ dominion,”§

* Capt. Low’s History of Tennasserim, Jour. Royal As. Soc. Vol. V. p. 259.

† Pemberton’s Report on the Eastern Frontier, p. 110.

‡ Journal Royal As. Soc. Vol. V. p. 250.

§ Ibid.

and it is probable, that from this word is derived Chinay, which was the name given by the older geographers to a lake, whence the Brahma-putra was supposed to issue.

Serica is described by Ptolemy, as bounded on the east and north by unknown countries, on the west by Scythia extra Inaum, and on the south by India extra Gangem and the country of the Sinæ. The words which describe the relative position of the latter nation, are in the Latin text; “Quodque supra Sinas, Serum jacet regio et metropolis.”* This evidently refers to Upper Assam, which may, therefore, be considered as the country, in which, Sera, the metropolis of the Sinæ (της των Σινων μητροπολεως) was situated. A river called Serus is represented by Ptolemy, as rising in a situation apparently corresponding with that of the mountains in which the Irawaddce has its origin, and as running to the south, through India extra Gangem. The latitude, which is assigned to Sera, is ten degrees north of that of Sadiya in Upper Assam—the former being mentioned as 38° N. L. and the latter being 28° N. L.—an error which is, no doubt, to be attributed to the very vague and imperfect knowledge which the ancients had of this country.

The journey from the Stone Tower to the frontier of Serica occupied a space of seven months. It is described as attended with many difficulties and hardships, and it seems to have been from the account of the bleak inhospitable regions of Bootan and Thibet, the excessive cold of the climate, and the severe storms which the travellers encountered: “via autem quæ est a turra lapidea ad Seras vehementissimis obnoxia est tempestatibus,”† that Ptolemy was induced to assign to Sera the northern latitude which is mentioned above. Marinus derived his information regarding the route to Serica from Maës of Macedon, called Titianus, who sent agents from the Stone Tower to trade with the people of that country. He describes the route, which the caravan travelled from Byzantium to the Stone Tower, as crossing Mesopotamia from the Euphrates to the Tigris, as proceeding through Assyria and Media to Ecbatana, to Hecatompylos, and to Margiana, and thence through Aria, or Herat, to Bactria or Balk. It next crossed a range of mountains called Montes Comedorum, whence it proceeded through the country of the Sacæ, and then arrived at the Stone Tower.‡ Different sites have been assigned to the latter place, but it is probable, notwithstanding the

* Ptol. Lib. I. Chap. XVII.

† Ibid. Chap. XI.

‡ Ibid. Chap. XII.

position given to the Montes Comedorum to the north-east of Bactria, that it was a station near one of those *Topes* or lofty towers, which are to be seen in the kingdom of Cabul. No itinerary appears to have been kept of the route from this place to the frontier of Serica, but from the account which is given of it, and of the difficulties that occurred in travelling through the intervening country, it seems to have been identical with that mentioned by Arrian from Thina to Bactria, or with the route from Bootan to Cabul and thence to Balk, which is described by Tavernier, as extending "over deserts and mountains covered with snow, tedious and troublesome as far as Cabul, where the caravans part, some for great Tartary, others for Balk."

It would appear that the merchants, who traded with the Seres, were not allowed to enter the country of the latter, but that they carried on traffic with them at an opening or pass in the mountain Imaus. This evidently refers to one of the *duwars* or mountain passes into Assam, where the merchants from Bhotan and Thibet formerly assembled to traffic. The circumstance of strangers having been prohibited from entering Serica has been regarded as an indubitable proof of the identity of that country with China, but the same jealousy of foreigners, it may be remarked, existed among the Assamese, and led to their exclusion from their territory. Dr. Buchanan remarks that in former times the only communication that was permitted by the Assamese between their own country and Bengal, was by the pass of Luckhah, eighteen miles north of Sylhet, and that of Bookool in Cachar, all access by the Brahmaputra having been strictly prohibited. Dr. Wade also states, "strangers of every description and country were scrupulously denied admission into Assam."* The same prohibition was enforced against the admission of strangers through the *duwars* or passes leading into it from Bootan and Thibet, and it appears, therefore, to have been at one of these passes, described as an opening in Imaus, that the agents of Titianius carried on their trade with the Sinæ, Seres, or Assamese. There are two routes from Bootan and Thibet to Assam, by which a commercial intercourse is carried on in the present day. That from Bootan is by the valley of the Monas, viâ Tassgong and Dewangiri: the other does not enter any part of the Deb and Dhurma Rajah's dominions, but extends through a tract of country dependent on Lassa, from Towung to

* Martin's Eastern India. Vol. 3. p. 626.

the Kooreeparah Dnwar. The traffic is conducted by a class of Tibetans called Kumpas, an appellation that is given to the inhabitants of the southern part of Thibet or that portion of it which is included within the great bend of the Sanpo up to the point where it enters the Abor hills. The Kumpas proceed to Hajoo in Assam, the resort of pilgrims from Bootan and Thibet, and carry on their traffic at the great annual fair which is held there. "It is estimated" says Capt. Pemberton, "that during the season there are about two thousand Kumpas assembled at Dewangiri, where they erect huts for temporary occupation on the subordinate heights. On quitting the hills to descend to the plains they are accompanied by Gurpas and Zeenkafs on the part of the Dewangiri Rajah, from whom they obtain passports and pledge themselves to return by a stated period. "The goods they bring, consist of red and party-coloured blankets, gold dust, silver, rock salt, chowrees, musk, and a few coarse Chinese silks, minjeet and bees wax : " these they exchange for lac, the raw and manufactured silks of Assam (the *ἔριον καὶ τὸ ὀθονιον το σπρικόν* of the *Periplus*), cotton, dried fish and tobacco: they return homewards during the months of February and March, taking care to leave the place before the return of the hot weather or rains."* In 1809 this trade amounted to two laes of rupees. The principal article that was purchased by the Kumpas was silk, consisting both of the muga and eria kinds.

That Assam is the country that is referred to by Ptolemy, is further probable from the fact stated by him, namely, that there was another route to Serica viâ Palibothra: "quod non solum inde ad Baetra iter si per turrin lapideam, sed et in Indiam quoque per Palimbothra."† This might be regarded as referring to the route through Nepal and Thibet to China, but it seems more probable that it has allusion to the Brahmaputra and the entrance to Assam by Gowalpara, which is the route by the Ganges mentioned by Arrian, or that by which merchandize was exported to Limurike.

Again, Ptolemy remarks that beyond, or to the east of Serica, there was an unknown or unexplored country containing lakes or marshes, in which grew large canes, so compact or close to each other, that the inhabitants in the neighbourhood were in the habit of using them as

* Vide Pemberton's Report on Bootan, p. 144.

† Ptol. Lib. 1. Chap. XVII.

bridges; “ac quod his orientaliore terra sit incognita stagna habens paludosa in quibus calami nascuntur magni et ita compacti ut accolæ transfretare soleant :” * or according to the Periplus Mariciani Heraclæotæ, “paludes habens uliginosas in quibus calami magni nascuntur, atque adeo densi et conferti, ut per illos sibi invicem adhærentes fiant transitus.” † There seems to be an allusion here to the cane bridges, which are so common in the hill countries bordering on Upper Assam; or to the roots or branches of trees growing on the opposite sides of streams or pools and so intertwined as to afford a passage across them. Lient. Yule, speaking of bridges of this kind in the vicinity of Cherra Poonjee, remarks, that while travelling through that country, he saw such bridges in every stage, and that one measured 90 feet in span: they were generally composed of the roots of two opposite trees bound together in the middle. (Vide Journal Asiatic Society, Vol. XIII. p. 613.)

Ptolemy states that mountains surround Serica, (montes autem cingunt Sericam,) and that it is traversed to a considerable extent by two large rivers—a description which proves that Serica was a valley. The mountains surrounding Serica were designated the *Annibi*, which appear to be the Abor hills; the *Auxacii* extending from Scythia extra Imaum into Serica, which are apparently the Auka hills on the northern side of Assam: Mount *Casius*, or the mountain where the Brahmakund is situated: Mount *Thagurus*, apparently the Tabis of Pomponius Mela, and Pliny, which seems to be Reging; and the chain or range of the *Emodi* or Himalaya, the eastern parts of which were called *Sericus* and *Ottorocorras*—the latter being identical with the Uttara Cura of the Hindoos, or the snowy range which separates Assam from the country of the Lamas.

Two rivers called Oechardes, and Bautes or Bautisus, flowed through Serica. They are delineated in the map of Serica, attached to Ptolemy's Geography as running to the north; but this must be an error, as there is no country in the situation assigned to Serica, namely, *bordering on India extra Gangem (Burmah) and the country of the Sinæ (Siam and Laos) on the north*, which has rivers proceeding in this direction. It is evident that the rivers, which are alluded to, are the Sanpoo or

* Ptol. Lib. I. Chap. XVII.

† Vide Geograph. Vet. Script. Græc. Minor. Hudson, p. 29.

Erochoomboo, and the Brahmaputra, and that the error in their delineation in the maps of Ptolemy's Geography by Agathodæmon, consists in their being laid down, as running *to*, instead of *from*, the north or north-east. The Oechardes is described by Ptolemy, as having its origin in Seythia extra Imaum, as flowing through that country, as having a great bend or curve in its course, and as afterwards entering Serica. This exactly corresponds with the Sanpoo which runs through Thibet, and which has an extensive bend or turn in its course before it enters Assam. The Bautes is the Brahmaputra. It is delineated in the map of Serica, as being composed of two large affluents rising from the mountains called Ottorocorras or Sericus, and Casius. They are the Dibong, which is composed of two branches; and the Brahmaputra which proceeds from the mountains on the east and north-east of Assam. The Bautes is described by Cellarius, as entering Serica "*reeto casu*," which perhaps refers to the straight course of the Brahmaputra from the Brahmakund. This celebrated place of pilgrimage is designated the sacred pool—the Deo-panee—or divine well of Brahma. The summit of the rock, which is described by Capt. Bedford as inaccessible, is called by the Hindoos—the Deo Bari or dwelling of the deity, and it is perhaps with reference to this natural temple of the god of the Hindoos, that the ancients designated this rock and mountain—Mount Casius—a name that was probably suggested by the resemblance (real or supposed) between this rocky mountain and Mount Casius of Syria, the site of a temple to Jupiter. Dr. Stevenson remarks: "when the ancient Romans came to any new country they were sure to find there a Jupiter."* "The common figure," says the Abbe Bannier, "by which Jupiter Cassius used to be represented, was that of a rock or steep mountain, as is to be seen on several medals quoted by Vaillant."†

Ptolemy describes the two rivers Oechardes and Bautes, as flowing through the greatest part of Serica. (*Sericæ autem regionis maximam partem duo perecurrunt fluvii.*) This may be considered as referring to the two great parallel branches of the Brahmaputra, which enclose Majuli and the islands in the upper part of its course. These branches, perhaps, ran a much longer course than they do at present, and were distinguished by the names of the two great parent streams, the Oechardes

* Journal Royal Asiatic Society, Vol. V. p. 191.

† Vide Mythology of the Antients, Vol. II. p. 220.

and the Bautes, or the Sanpoo and the Brahmaputra, of which they are formed. This division of the river into parallel branches is mentioned in connexion with one of the oldest traditions regarding Assam, namely, that the original territory occupied by Khuntai, the first king of that country, included two very long islands formed by branches of the Brahmaputra.*

Several nations or people are mentioned by Ptolemy as inhabiting Serica—a certain proof that this valley was one of great extent; and with reference, therefore, to its situation on the north of India extra Gangem (*Burmah*) it can be no other than Assam. Ptolemy mentions, *Anthropophagi* on the northern parts of Serica. Below them were the *Annibi*, who derived their name from their own mountains (gens ejusdem nominis cum montibus quibus superjacet). They are the Abor tribes, who occupy a range of hills on the northern side of Assam. In the same situation, namely, the northern side of Serica, Ptolemy mentions the *Auxacii*, who appear to be the Aukas. Between them and the *Annibi* were a people called *Sizyges*. Many of the names mentioned by Ptolemy closely resemble the names of places or tribes of people in Assam in the present day: thus the *Damnæ* appear to be the Doms: the *Garinæi*—the Garos: the *Nabannæ* (rendered *Rabannæ* by Berthius and other commentators)—the Rabhas: the *Asmeracæi*, the Mirces: the *Oechardeæ*—the people of Chardwar: the *Batæ*—the Booteahs: the *Ottorocorræ*, the people of Outtergorah. The situations or relative positions which Ptolemy assigns to these different nations, do not in every instance correspond with the localities inhabited by the tribes or people of Assam bearing the same names in the present day; but though this is not the case, there can be little doubt from the close affinity that exists between them, that they are the people that are alluded to.

Ammianus Marcellinus gives a general account of the physical aspect, extent, fertility, and nations of Serica. He describes it as a valley extending to the Ganges, and as abounding in silk, from which it may be inferred that Assam is the country that he alludes to.

“Ultra hæc utriusque Seythiæ loca, contra Orientalem plagam in orbis speciem consertæ celsorum aggerum summitates ambiunt Seras ubertate regionum et amplitudine circumspectos: ab occidentali latere Scythi adnexos: a Septentrione et orientale nivossæ solitudini cohærentes:

* Vide Buchanan in Martin's Eastern India, Vol. III. p. 602.

qua meridiem spectant adusque Indian porrectos et Gangem. Adpellantur* autem iidem montes Anniva et Nazavieum et Asmira et Emodon et Opuroearra. Hanc itaque planitiem undique prona declivitate præruptam, terrasque lato situ distentas duo famosi nominis flumina O'Echar-des et Bautes lentiore meatu percurrunt. Et dispar est tractuum diversorum ingenium : hic patulum alibi molli divexitate subduetum : ideoque satietate frugum et pecoribus et arbustis exuberat. Ineolunt autem fecundissimam glæbam, variæ gentes e quibus Alitrophagi et Annibi et Sizyges et Chardi aquilonibus objecti sunt et prninis. Exortum vero Solis suspiciunt Rabannæ et Asmiræ et Essedones omnium splendidissimi : quibus Athagoræ ab occidentali parte cohærent et Aspacaræ. Betæ vero australi celsitudini montium inclinati urbibus licet non multis magnis tamen eelebantur et opulentis : inter quas maximæ Asmira et Essedon et Asparata et Sera nitidæ et notissimæ. Agunt autem ipsi quietus Scres armorum semper et præliorum expertes : utque hominibus sedatis et placidis otium est voluptabile, nulli finitimorum molesti. Cæli apud eos jucunda salubrisque temperies, aeris facies munda, leniumque ventorum commodissimus flatus : et abunde, silvæ sublucidæ : a quibus arborum fetus aquarum asperginibus crebris veit quædam vellera mollientes ex lanugine et liquore mistam subtilitatem tenerrimam peetunt nentes que subteminæ conficiunt serieum ad usus adhuc Nobilium, nunc etiam infimorum sine ulla discretione proficiens. Ipsi præter alios frugalissimi pacatoris vitæ cultores, vitantes reliquorum mortalium cætus. Cnnique ad eoëmenda fila, vel quædam alia fluvium transierent advenæ nulla sermonum vice propositarum rerum pretia solis oculis æstimantur : et ita sunt abstinentes ut apud se tradentes gignentia nihil ipsi comparent adventicium (advectitium).”†

The words, “ *in orbis speciem consortæ celsorum aggerum summities ambiunt Seras,*” are generally supposed to refer to the mountains of Serica mentioned in the subsequent sentence of the text, but it may be fairly questioned, whether they should not be taken in their literal sense, and be considered as applying to those extensive causeways, the remains of which are still to be seen in Assam. Dr. Wade mentions several of these embankments. He describes a military causeway extending from Coos Bahar (Cooch Behar) in a northern direction to the

* Appellantur.

† Ammianus Marcellinus, Lib. XXII. Chap. VI. pp. 293, 294. Edit. Gronovius.

utmost limits of Assam—forming a part of the southern boundaries of the Bootan dominions. “A modern causeway formed by Pertaub-sing, which runs from Coosbeyhar through the whole extent of Assam to Sadiya, forms the boundaries of Dehrung on the north.” The Okkooruralee causeway is mentioned as separating the country of Ranigawn from Beltola. “The famous causeway of Rangulighur, which divides the district of Coliabur on the east from Upper Assam, is described as a rampart which runs from Colone near its junction with the Brahmaputra during a course of ten miles to the southern mountains.” “A great causeway or high road raised to preserve the interior from the inundation of the river Dehing” is mentioned as situated in Khonani. It is described “as a work of immense labour.” Rung-pore, the capital of Assam, is said to have had the Duburriunniali rampart, or high road, as its security or defence on the east. It is further stated that the banks of the river Dikho, near which the fortress of Rungpore stands, “are connected by a lofty rampart with the southern mountains through an extent of ten or fifteen miles. It was constructed in remote antiquity for the protection of Gourgown, which was the principal residence of the monarch, and all the great officers of state.”* These causeways, besides constituting roads and dams to protect the low country from inundation, served also as defences, for which purpose they were surmounted with palisades of bamboos. Mahomed Cazim describes a high broad causeway leading from Salagerch to Ghergong, a distance of about fifty coss (one hundred miles), each side of which, he remarks, “is planted with shady bamboos, the tops of which meet and are intertwined.” He further describes the latter city as encompassed with a fence of bamboos, and states that within it are high and broad causeways for the convenience of passengers during the rainy season. “The Raja’s palace is surrounded by a causeway planted on each side with a close hedge of bamboos, which serves instead of a wall, and on the outside there is a ditch which is always full of water.”† Butkhyr Khulijy, who invaded Assam in 1205, mentions stockades which were formed of stakes interwoven with bamboos in that country.‡ Fitch, also, in describing Coonch (Cooch Behar) remarks: “all the country is set with bamboos or canes made sharp at both ends and driven into the

* See Wade’s *Geography of Assam* in *Martin’s Eastern India*, Vol. 3. pp. 630, 633, 635, 637. † *As. Res.* Vol. II. p. 179. ‡ *Stewart’s History of Bengal*.

earth.”* The words, “*ubertate regionum et amplitudine circumspectos*” applied to the Seres, seem to imply, that the “*aggeres celsi*,” with which they were surrounded, were not mountains, but works of art, constructed to protect their extensive and fertile territory from the incursions of hostile tribes. It is probable, therefore, that these defences, the summits of which are described by Ammianus Marcellinus, as interlaced or intertwined in a circular form, were stockades at the duwars, or close hedges of bamboos erected or planted on the causeways of Assam, with their tops intertwined in the manner mentioned by Mahomed Cazim.

The position which Ammianus Marcellinus assigns to the Scythians, corresponds with that of *Scythica extra Imaum*, which is placed by Ptolemy on the western side of Serica. On the ground that this Scythia is Thibet, Murray infers that China, which lies to the east of that country, is Serica. The account, however, which both Ptolemy and Ammianus Marcellinus give of the other boundaries of Serica, is opposed to the opinion which identifies Serica with China. The former author makes no mention of the sea, as the boundary on the east, which, in all probability, he would have done if he had been describing China: but speaks of Serica, as bounded in this direction by unknown lands. Ammianus Marcellinus describes Serica, as situated beyond the two Scythias, (viz. to the south of them,) and as lying opposite to the eastern country, which can be no other than China. He more particularly describes the country of Seres, as being adjacent on the north and east, to a dreary region of frost and snow, which refers, no doubt, to the lofty snowy peaks of the Himalaya, which surround the eastern part of the valley of Assam. That Serica is not China, but Assam, is still more probable, from the circumstance of India being mentioned by Ammianus Marcellinus, as lying to the south of the latter country. This is India extra Gangem, which is referred by Pomponius Mela, Pliny, and Ptolemy, to the situation assigned to it in the text. Pomponius Mela, and Pliny give a general description of the situation of Serica. “They agree,” says Vincent, “that their boundary [viz. that of the Seres] on the north is Tabis, and Taurus on the south: that all beyond them north is Scythia, and all beyond them south is India east of the Ganges.” Tabis and Taurus seem to be mountains in Upper Assam, the former being, perhaps, the mountain

* Huklyut's Voyages.

“Reging” of the Abors, which is so conspicuous an object from Sudiya; while the latter may refer to the high Naga hills, which may have been regarded as extending to the exterior sea, or gulph of Siam. India, which Ammianus Marellinus mentions as bounding Serica on the south, is evidently *India extra Gangem*. This, coupled with the circumstance of Serica being described as extending to the Ganges, seems quite conclusive of the identity of that country and Assam. It is mentioned as an extensive and fertile valley, inhabited by various nations, watered by large rivers, and abounding in silk, and it is evident, therefore, that the description applies to no other valley than Assam. The account, which Ammianus Marellinus gives of the country of the Seres (namely, as extending to the Ganges) renders it probable that the eastern part of Bengal or the countries east of the Brahmaputra and Tistha, as Rungpore, Mymensing, and Sylhet, were designated India Serica. In the second book of “*Ravennatis Anonymi*,” we find mention made of an extensive region called “*India Serica*,” which was traversed by numerous rivers “*Per quam Indiam Sericam transeunt plurima flumina : inter cetera, quæ dicuntur id est Ganges, Torgoris, et Aceessenis quæ exeunt in Oceanum*,” (Vide *Ravennatis Anonymi Geographia*, Edit. by Gronovius.)

The mountains called *Annira* (the Annibi of Ptolemy) are the Abor hills. *Nazavicum* is the Naga range. *Asmira* is the range inhabited by the Miris. *Emodon* refers to the Himalaya. *Opurocarra* (or the *Ottorocara* of Ptolemy) is Uttararoeora or Outtargorah or the mountains on the north eastern part of this valley.

The Oechardes and the Bautes, as I have already mentioned, are the Sanpoo and the Brahmaputra, or rather the two paralled branches of the latter which enlose Majuli and the other islands in Upper Assam. They are mentioned as rivers “*nominis famosi*.” This refers to the Brahmaputra, or rather the Brahmakund, which has always been a celebrated place of pilgrimage among the Hindoos. “During the time of the Ahoms,” says Lieut. Rowlatt, “it was necessary for the king on his ascension to the throne to be washed in water brought from this place, and until this ceremony was completed he was not considered fit to take upon himself the reins of government.” (*Asiatic Society’s Journal*, Vol. XV. p. 486.) This romantic spot is described by Capt. Bedford “as situated on the left bank of the river : it is formed by a projecting

rock, which runs up the river parallel to the bank and forms a good-sized pool that receives two or three rills from the hills immediately above it. When seen from the land side by which it is approached, the rock has much the appearance of an old gothic ruin, and a chasm about half-way up which resembles a carved window, assists the similitude. At the foot of the rock is a rude stone seat : the ascent is narrow and choked with jungle, half way up is another kind of seat in a niche or fissure, where offerings are made : still higher up from a tabular ledge of the rock, a fine view is obtained of the Kund, the river, and the neighbouring hills : access to the summit, which resembles gothic pinnacles and spires, is utterly impracticable." (See As. Res. Vol. XVII. p. 353.)

The Oechardes and the Bautes are represented by Ammianus Marcellinus as meandering through a plain or valley, which he describes as *undique prona declivitate præruptam*, and through wide or open tracts of country (*terrasque lato situ distentas*). This is a correct description of Assam, which is an extensive valley surrounded on its eastern and northern sides by lofty mountains, which rise abruptly like a wall to a height of five or six thousand feet above the level of the adjacent plains. The diversified scenery which Serica is described as presenting—*dispar est tractuum diversorum ingenium ; hic patulum, alibi moli diversitate subductum*—corresponds with the varied physical aspect which Assam exhibits in its low ranges of undulating hills, its extensive plains, and the conical-shaped hills which rise from its surface. The luxuriant fertility of Serica refers to the rich productive soil of Assam, which, though now greatly overrun with jungle, appears to have been highly cultivated in former times. Mahomed Cazim describes Upper Assam in A. D. 1661, "as a wide, agreeable country which delights the heart of the beholder. The whole face of it is marked with population and tillage, and it presents on every side charming prospects of ploughed fields, harvests, gardens, and groves." The country extending from Salagirch to the city of Ghergong is further described "as a space of about fifty coss, filled with such an uninterrupted range of gardens plentifully stocked with fruit trees that it appears as one garden. Within these are the houses of the peasants, and a beautiful assemblage of coloured and fragrant herbs, and of garden and wild flowers blooming together."* He states that "the strength and fertility of the soil are such that what-

* As. Res. Vol. II. p. 173.

ever seed is sown or slips planted they 'always thrive.' " Tavernier, likewise describes it about the same date, "as one of the best countries in Asia, as producing all the necessaries of life and standing in no need of foreign supplies;" also "as possessing mines of gold, silver, lead, and iron, and as abounding in silk, and lac." Speaking of the natural resources of Assam, Mr. McCosh observes: "This beautiful tract of country enjoys all the qualities for rendering it one of the finest in the world: its numerous crystal streams abound in gold dust and masses of the solid metal: its mountains are pregnant with precious stones and silver: its atmosphere is perfumed with tea growing wild and luxuriantly: and its soil is so well adapted to all kinds of agricultural purposes that it might be connected into one continued garden of silk, cotton, coffee, and sugar, and tea, over an area of many hundred miles." (McCosh's *Topography of Assam*, p. 133.)

The people or nations mentioned by Ammianus Marcellinus, as inhabiting the most fertile and productive region of Serica, are many of those enumerated by Ptolemy. The *Alitrophagi* are (as Vossius interprets the word) the *Anthropophagi* of Ptolemy, or the *Androphagi* of Pomponius Mela: they occupied a mountainous country north of the Annibi or Abor tribes, and are apparently identical with the Tikleya Nagas of Dr. Buchanan, or the Mishmees of Bubbajeea reported to Capt. Bedford, "as being a fierce race of cannibals."* The *Annibi* referred to a situation on the northern side of the valley of Serica and deriving their name, according to Ptolemy, from their own mountains (*Annibi a suis montibus denominati*, Cellarius), are, beyond doubt, the Abor tribes occupying the hills on the north side of the eastern part of Assam. The *Chardi* would seem, from their name, to be the people of the district of Chardwar: they are mentioned under the name of *Oechardi* by Ptolemy, and as inhabiting a tract of country on the banks of the river of the same name. In the *Rabannæ* (the *Nabbannæ* of Ptolemy—rendered *Rabannæ* by his commentators) are recognized the aboriginal tribe or people of Assam called Rabhas. The *Asmiræ* seem to be the Miris. Ptolemy mentions their country as situated between two rivers and as extending to the mountains of the same name (*inter fluvios Asmiræ gens ad montes Asmireos*, Cellarius). The *Batæ* are evidently the Booteahs: they are erroneously described, as inhabiting a

* *As. Res.* Vol. XVII. p. 533.

mountainous country on the southern, instead of the western, part of Serica. They are the *Betæ* of Ptolemy and are referred by him to the latter situation. The *Essedones* are the *Issedones* of Ptolemy, described by him as a great people. The other nations of Serica mentioned by Ammianus Marcellinus cannot be identified with any people of Assam in the present day. It is probable that they occupied the rich and fertile parts of the valley. That Assam was anciently inhabited by an industrious and civilized people is abundantly proved by the remains of various and extensive works of public utility, as embankments, tanks, bridges, and forts, which are still to be seen. The ruins of temples, also, are scattered over the country. "These temples," says Major Jenkins, "all completely overthrown, speak of long periods of prosperity and great revolutions of which we are entirely ignorant."—From one of the temples at Hajoo being frequented by pilgrims from all parts of Thibet and Tartary he imagines that the Buddhist faith formerly prevailed in Assam and that this may account in part for the destruction of the temples. "That faith," he remarks, was succeeded perhaps by the Brâhminical under the Pals, i. e. the Pal dynasty: they were swept away by the Koches, who probably were not Hindoos till they ceased to be conquerors, as was the case with the Ahoms, who with the Mahomedans then contended for Kamroop, and both perhaps destroying the temples which fell into their power."*

Asmira and Essedou are mentioned, as the largest, and Asparata and Sera, as the most noted cities of Serica. Sera, which was the capital or metropolis of the Sinæ, is described by Ptolemy as the city of Serica, situated farthest to the east. It seems, therefore, to have stood in Sadiya in Upper Assam, and as its site is laid down in the map attached to Ptolemy's Geography, as being close to the mountains called Ottorocorras which bounded Serica on the north-east, and near one of the rivers which formed the Bantes, it would seem to be identical with the site of one of the forts which have lately been discovered by Lieut. Rowlatt, close to the hills east of Sadiya. He has given an account of these forts in a highly interesting Report of his expedition to the Mishmee hills in November 1844; published in the Journal of this Society—(Vol. XIV. p. 477.) He states:—

"Soon after my return from the Mishmee hills I again left Saikwah

* Journ. As. Soc. No. 104. p. 777.

and proceeded by elephant up the Koondil-panee, and after passing the mouth of the Depho-panee, followed up the course of that stream, until I arrived at the foot of the hills; and as the fort I was in search of was said by my Khamptee guide to be between the Depho and Jameesa, I took a direction through the jungle about east, and without much difficulty arrived at the fort five days after quitting Saikwah.

“ This fort is said to have been built by Raja Sisopal, and is situated on an elevated plain at the foot of the hills; the extent of it is considerable, as it took me about four hours to walk along one side of its faces: the defence is double, consisting of a rampart of stiff red clay, which, as the surrounding soil appears of a different nature, must have been brought from some distance. Below this rampart is a terrace of about 20 yards in breadth, beyond which the side of the hill is perpendicularly scarped, and varies from 10 to 30 feet high; the principal entrance, and the defences for some distance on either side, are built of brick, and on many spots in the interior I observed remains of the same materials, so that in all probability the houses occupied by the inhabitants must have been built of masonry. As I was unable from scarcity of provisions to remain more than one day at this place, I could not examine it so minutely as I could have wished. It seemed however to be composed of only three sides, the steepness of the hill at its north face precluding the necessity of any other works. At present the whole of the northern part of it is thickly covered with tea, which extends, according to the Khampteers who know the locality well, in a belt of more than a mile in depth all along the foot of the hill within the fort, and not as marked in my map, which was drawn before I visited the place. More to the west between the Dihing and Dehong is a much larger fort, and, as I believe, entirely composed of brick, as well as a tank of similar construction, surrounding which are numerous hill forts of small dimensions erected by a Raja named Bhishmuk, and the popular tradition amongst the people of this part of the country is, that on the destruction of the empire of these kings by the Hindoo god Krishno, the people who were able to make their escape fled to the hills, and have in the course of time become converted into the present tribes of Abors. Near these forts a great number of wild Methuns* are to be met with, and the whole of the country, from the mouth of

* *Bos frontalis*, or allied species.—*Cur. As. Soc.*

Koondil to the base of the hills, presents many indications of former cultivation. On this expedition I was absent nine days." Major Jenkins remarks that these forts refer to a time of which we have no history or even tradition further than frequent traces of the dynasty of the Pals throughout Assam. Alluding to the destruction of the empire of these kings by Krishno and the conversion of those who escaped to the hills into the present tribes of Abors, he states : " if the Pals were Buddhists, this tradition may allude to their overthrow by the Rajas of the Bráhmínical faith ; but all authentic records of those times appear to be lost, at least in this province."

The origin of the name of Sera is involved in obscurity. There is a place of this name, the site of a monastery, in the vicinity of Lassa, which has been supposed by Malte Brun to be the Sera of the ancients. The former, however, was built in the 8th century* and it is obvious, therefore, that it is not the Sera of Ptolemy. Sera is also the name of a town in Mysore. The word is evidently one of Indian derivation, and is probably a corruption of Sri, " sacred." It has reference, perhaps, to the site of Sera in the vicinity of the sacred Brahmakund, from which the Sri Lohit (or sacred Lohit) the Irawaddee, and the Brahmaputra were formerly supposed to issue. The Irawaddee is apparently the river designated " Serus" by Ptolemy. The mountains in the vicinity of Sera, from which one of the affluents of the Brahmaputra is represented as having its origin, were called Serici. It is said that *se* is the name of silk in China, and it is supposed that from this word the name of Seres is derived. It was conjectured by an ancient author, that the name, by which the silk worm was designated, was the origin of the term Seres. " Pausanias, Seres populum a sere vermiculo dictum cencet." (Vide Steph. Thesaur. Ling. Græc.) The name of Seres, however, occurs before it was known that silk is the production of an insect. Virgil, Dionysius, and Pliny mention the Seres, but describe silk, as a substance that is obtained from the flowers or leaves of certain trees. The derivation of Sericum from Seres is particularly mentioned by one author ; " Sericum dicitur a Seribus." It is also stated that silk was called Sericum because the Seres were the first who exported it ; " Sericum dictum quia id Seres primi miserunt." It is probable therefore, that the Seres derived their name from the city of Sera,

* This information I obtained from the late M. Csoma de Koros.

which stood near the sacred fountain of the Brahmaputra. Hence Assam was called Serica, and its staple commodity, viz. silk, was designated Sericum, while the other articles of merchandize, which were exported from it, were distinguished by the adjective Seric, as *Σηρικά δερμάτα* *Seric skins*; *ferrum Sericum*, *Seric iron*.

Issidon, called Issedon Serica by Ptolemy to distinguish it from Issedon Scythica which stood in Thibet or Bootan, was the capital of the Issedones, who appear to have been the most powerful of all the nations of Serica. They are described by Ptolemy, as a *μεγα εθνος*, and by Ammianus Marcellinus, as “*omnium splendidissimi* ;” and from the situation assigned to their territory, it is probable that their capital stood in the vicinity of Ghergong, or Rungpore. Ghergong or Kirganu, as it was anciently called, (Vide Rennel’s Memoir, &c. p. 299,) appears to be the Kangigu of Marco Polo. Marsden remarks that this country is designated “*Cargingu*” in the early Italian Epitome. It is described as a kingdom situated eastward of Bengal, and as having voluntarily submitted to the authority of Kublai Khan. The people are stated as being idolators and as having a peculiar language. The country is described as abounding in elephants, gold, and many kinds of drugs, but being an inland country distant from the sea, there is no opportunity of selling them. The inhabitants lived on flesh, rice, and milk ; and tattooed their bodies.* The Ahoms transferred the seat of government to this place from Hulagari Nuggur, but from the architectural remains which are still to be seen in its vicinity, it would appear to have been, before it became their capital, the site of a city which belonged to a people far advanced in civilization.

Asmira was the capital of the Asmiræ, whose territory is described by Ptolemy as situated below the mountains of the same name (subque iis Rabbannæ Asmiracæ est regio, supra ejusdem nominis montes, *Ptol.*). It probably stood in Lackimpore, where the Chutteeahs, a branch of the Shyan family had possessions, before the Ahoms came into Assam. There are various remains of antiquity to be seen in Lackimpore, as tanks, and the remains of an embankment called Rajghur, which, Lieut. Dalton remarks, “*bears the appearance of having been constructed as a rampart against the inroads of the hill people.*” He describes it as being “*a stupendous work.*” (*Journal Asiatic Society*, Vol. XIV. p. 252.)

* Marsden’s Travels of Marco Polo, p. 455.

Asparata (the Aspacara of Ptolemy) appears to be the ancient city of Pora in the district of Chardwar. Capt. Westmacott considers Pora as identical with Pratappur—a splendid city which is described in the ancient manuscript records of the kings of Assam, as having stood on the north bank of the Brahmaputra, a little below Bishnath. The ancient temples and ruins of Pora are described by him in the *Journal of this Society*, Vol. IV. p. 185. He remarks: “From their massive proportions and the carvings and ornaments being so much worn by time and exposure, the fanes are evidently the work of a remote era: I sought in vain for an inscription, and neither the priests of the district nor the ancient families whom I consulted could assist my researches, or point with an approximation to accuracy to the date of their origin.” He mentions the ruins of six or seven enormous structures of granite broken into thousands of fragments. “Altars of gigantic proportions were the most remarkable objects,” one of which he describes as making a square of forty-six feet and eighteen inches thick. He states: “it is certain from the prodigious number of ruinous and deserted temples, all of which appear to have been dedicated to Siva, being within the circuit of a few miles of Pora (I discovered twelve or fifteen in as many days on the hills and high lands at their feet) that this spot must have been the capital of a sovereign Prince, or a principal seat of the Hindu religion and enjoyed a large share of prosperity at some remote period.”

Besides the four cities mentioned by Ammianus Marcellinus there are eleven others which are enumerated by Ptolemy as belonging to Serica, viz. Damna, Piada, Tharrhana, (*Pal. Throana*) Drosache, Paliana, Abragana, Thogara, Daxata, Orosana, Ottorocorrha, and Solana. There are various places in Assam and in the neighbouring hilly tracts to which the sites of these places might be referred. Ottorocorrha stood in the vicinity of the hills of the same name, and was apparently one of the two forts which are described by Lieut. Rowlatt. Mr. McCosh mentions that there are many extensive forts scattered over the country, and particularises Buddea-ghur, Rajah-ghur, and Gohatti as the most remarkable. Speaking of the latter place, he observes: “A small portion of its former extent and grandeur now remains: its mortar and earthenware constitute a large portion of the soil: its numerous spacious tanks, the works of ten thousands, the pride of its princes, and the wonder of the present day, are now choked up with weeds and jungle or altogether

effaced by a false though luxuriant soil that floats on the stagnant water concealed beneath." Some of its gateways are still standing, and mounds and ditches—the remains of its fortifications—are to be seen for many miles around it. The intervening mountainous country between Assam, Cachar, and Manipore appears to have been cultivated formerly, and as Mr. Torrens remarks, to have been "thickly inhabited by a people far advanced in civilization."* The remains of the fortified city of Dhempore on the banks of the Dhausiri, built by Rajah Chakardhaj, the fourth king of Cachar, are described by Mr. Grange, by whom they were discovered, in the *Journal of this Society*.† According to Mr. Crawford, the *Burmese Annals* mention Jynteah in the vicinity of Sylhet, as the site of a principality called Wethali, which was founded by Susanaga, a descendant of Gautama in the female line. It is stated that the son of Susanaga named "Kalasanka, in the 10th year of his reign and 100 years after the death of Gautama, assembled all the learned men of his country, and made them repeat what they knew of the doctrine of Buddha: for there yet existed no scripture. This assembly is known to the Burmese by the name of the 'Second Council:' the First Council having taken place three months after the death of Gautama. From this time, to the year 289 before Christ, a period of 83 years, twelve princes are described as having reigned in Wethali: the last of whom Sri-d'hama-sanka, is a personage of some repute. It was the son of this pious reformer who permanently fixed the seat of government at Prome."‡ These details identify the Wethali of the Burmese with the Wesali of the Pali Buddhistical *Annals of Ceylon*. Vesali, however, which is considered the same city as Wesali, is referred to a site on the river Gandak, near the Bakra column, or *lat*, discovered by Mr. Stevenson; and according to Professor Wilson there is early authority for identifying it with this locality.

The sedate and tranquil life which the Seres led, their unwarlike disposition and aversion to the use of arms, are characteristic of the indolent Assamese, who, inhabiting a rich and fertile country formerly fenced in, or protected against foreign invasion in the manner described by Ammianus Marcellinus, may be supposed to have enjoyed, in ancient times, the undisturbed ease and delightful tranquillity, which the words of the text,

* *Journ. As. Soc.* No. 104, p. † *Ibid.*

‡ Crawford's *Embassy to Ava*, p. 489.

“utque hominibus sedatis et placidis otium est volutabile, nulli finitimorum molesti,” seem to express.

The pleasant and salubrious climate, which is attributed to Serica, seems to refer to the climate of Upper Assam. “Comparatively speaking, Assam enjoys a far more peculiarly temperate climate with a greater equality of temperature than is general throughout India. The warm weather is very moderate, and throughout the year the nights are cool and refreshing. The mean annual temperature amounts to 67·2—the mean temperature of the four hottest months amounting to 80, and that of the winter to about 57.”* Mr. McCosh describes the climate of Upper Assam as “cold, healthy, and congenial to European constitutions.”†

Serica is described as abounding in groves or forests which are designated “sublucidæ,” an expression which seems intended to describe the effect produced by the myriads of luminous insects in the jungles of Assam. These insects appear to be far more abundant there than in Bengal : they are described as being seen to “glitter at night among the dark and leafy recesses of the forest trees, or flit with varied motions around their utmost branches, producing an effect so brilliant as to seem almost the effect of magic.”‡

The substance, the produce of the trees of these forests, which, after being sprinkled with water, is described as being spun out into the finest threads, is evidently the indigenous silk of Assam. There are six species of silk worms found in that country, namely, the *mulberry worm*, the *eria*, the *muga* or *moonga*, the *konthuri*, the *deo mooga* and the *haumpottonee*. The mulberry worm is supposed to have been originally introduced into Assam from Bengal, but the other five are indigenous to the country. Silk is one of the staples of Assam, and the material of which the clothing of the greater portion of the population is manufactured. The silk from the *Eria* worm, which is described as being very durable, is worn by the poor at all seasons of the year, and by every class in winter. Dr. Buchanan states “that the native women of all castes, from the queen downwards, weave the four kinds of silk

* Vide Major Jenkins’s Account of Assam in the Bengal and Agra Annual Guide and Gazetteer, 1844.

† Journal Asiatic Society, Vol. V. p. 195.

‡ Vide Robinson’s Assam, p. 125.

produced in the country, with which three-fourths of the people are clothed. The raw material is seldom purchased ; each family spins and weaves the silk which it rears, and petty dealers go round and purchase for ready money whatever can be spared for exportation or for the use of the few persons who have none of their own. Considerable quantities of the two coarser kinds are also exported. There may be one loom for every two women, and in great families there are eight or ten which are wrought by slave girls." The Muga moth is reared on seven different varieties of trees, and the extent of the plantations in Lower Assam is estimated by Mr. Hugon at 5000 acres exclusive of what the forests produce.* In Upper Assam the plantations are still more extensive. Mahomed Cazim describes the silks of Assam in A. D. 1661 " as being of excellent quality and as resembling those of China." He also states that the Assamese were skilled in embroidering with flowers and in weaving velvet and a kind of strong silk fabric called *tautbund* for making tents and *khenauts*.† Tavernier states that there is in Assam "great store of silk but coarse," and that there is a sort of silk found under the trees which is spun by an insect like the silk-worm.‡ The nature of Muga silk appears to have been unknown before this time. Methold, who visited India prior to A. D. 1620, speaks of it as being the production of a certain tree. He mentions as the imports into Masulipatam from Bengal, " calicuts, lawns, and divers sorts of cotton cloths, raw silk, and Moga, which is made of the bark of a certain tree ;" and he adds " many curious quilts and carpets are stitched with this Moga."§ Muga appears to be the substance which is mentioned under the name of *sericum* by the ancients, and which is described by them as being procured from the leaves or bark of certain trees. It is evident that they regarded it as a different article from the produce of the mulberry silk-worm which they designated *bombycina*. Bombycina was the name that was applied to the threads spun by an insect called Bombyx, which Aristotle describes as a horned worm that undergoes several transformations in the course of six months, and that produces the substance called " Bombykia." On the other hand, " Sericum" was supposed to be a vegetable production. Theophrastus, Virgil, Dionysius Periegetes, Pomponius Mela, Seneca, Arrian, Claudian, and Jerom

* Journal As. Soc. Vol. VI. p. 21.

† As. Res. Vol. II. p. 174.

‡ Tavernier's Travels, Chap. Assam.

§ Purchas's Pilgrims, Vol. V. p. 1005.

describe it as an article that was obtained from the flowers, leaves, or the bark of trees. Pliny distinguishes between silk, muga, and cotton. The first which he calls *bombycina*, he mentions as the produce of the insect bombyx, which he refers to Assyria; the second, or *sericum*, he describes as a downy or woolly substance which the Seres combed from the leaves of trees, which, he remarks, were different from the wool-bearing trees of Tylos in the Persian gulf, by which he means *cotton* trees. The latter are mentioned as differing from the trees in the country of the Seres in this respect that they produce down or wool, *not on their leaves*, but *in a fruit*, which is described as of the shape of a gourd, and of the size of a quince, and which, when ripe, opens and displays within balls of down or wool, of which fine and costly cloths are made. This substance was the produce of trees called Gosampinæ in the lesser isle of Tylos. (Pliny, Lib. xii. Chap. x. and xi.)

The word *εριον* in the Sequel, which Dr. Vincent has rendered raw silk, is used to designate the woolly substance, which the Seres combed from the leaves of trees. It might be supposed to be derived from *eria*, the name of one kind of indigenous silk of Assam, which Mr. Hugon states was formerly exported to Lassa, but it is evident from other ancient authors who make use of this term, that this is not its origin, and that it is merely the word *εριον*, *lana*, which is employed to express a woolly or downy substance which was procured from trees, and that it is applicable, therefore, to cotton, or to the Muga and other silks of Assam supposed to have been carded from the leaves, bark, or flowers of trees. This word in the passage *ινδοι εριω χρωνται η λινω* in Dionysius Periegetes, is rendered by Salmasius the wool not of cattle but of trees. Pultux mentions *ξυλου εριον* and Theophrastus *εριοφορα δενδρα*—terms which may be considered as referring either to cotton or the indigenous silks of Assam. *Sericum*, or the indigenous silk of Assam, though generally regarded by the ancients as the product of trees, is nevertheless mentioned by Pausanias as being produced by an insect.

The term *Metaxa* (*μέταξα*) which was subsequently applied to *Sericum*, appears to be a compound of the words *muga* and *tassar*, which are indiscriminately applied about Dacca to the muga silk of Assam or moongatassar, as it is frequently called. Raw-silk is mentioned under the name of *Metaxa* by Procopius, Suidas, Theophanes, and in the Digest. It was an article of import into Tyre and Baretus, where it was

woven into cloth. Silk merchants were called "metaxiarii," and the duty that was levied on the raw material was denominated "metaxiaticum." It is stated that the price of metaxa was raised by a tax imposed on it in Persia; and that, on the manufacturers, in consequence of this duty, charging a higher price for their cloths, Justinian fixed a maximum and ruined the trade.

From the manner in which Muga silk is produced, namely, by worms found on certain trees in the forests, or reared on trees planted for the purpose, the error of supposing this substance to be the product of the bark, leaves, or flowers of trees, is easily accounted for. The ancients knew that *bombycina* (or the mulberry silk) was procured from an insect, but the indigenous silk of Serica or Assam, which they thence called *sericum*, was supposed, from the accounts they received of it, to be the production of the leaves, the bark, or the flowers of trees.

Ammianus Marcellinus describes the process to which this supposed vegetable product "fetus arborum" was subjected, in order to facilitate the drawing out, or the reeling of the threads of which it consisted. This was performed by means of frequent sprinklings of water (or perhaps by immersing the silk in water and potash as is practised in Assam in the present day). From this mixture of down and liquid (*ex lanugine et liquore mistam*) the Seres combed out a very slender filamentous substance, and spinning it into woof threads, they wove them into the cloths called *Sericum*. The author mentions that this kind of cloth was originally, or on its first introduction into Europe, worn only by the nobility, but that in his time it was in common use among the lower classes of people. The cloth, which he here alludes to, appears from the woof alone having been made of silk, to have been a mixed cotton and silk fabric, such as is manufactured about Dacca in the present time. These cloths called Kaseedas, consist of two kinds, viz. of Muga silk and cotton woven in the loom, and of cotton cloths embroidered with Muga silk with the needle. The former have been manufactured here from time immemorial. Both kinds are annually exported from Dacca to Bussora and Jidda, whence they are conveyed into the interior of Arabia and Mesopotamia, where they are used as turbans, vests, &c. by all classes of people in these countries. A large quantity is sold at the great annual fair held in the vicinity of Mecca. Formerly, they were an article of export to Egypt and Turkey: and it

is probable, therefore, that they are the cloths of that kind which is designated “subserica” by ancient authors, from being made partly of metaxa or tassar silk, and partly, either of cotton or flax.

It would appear, also, that the ancients imported the strong silk fabric, which the Assamese formerly manufactured for tents. Dion Cassius (L. XLIII.) states, that Julius Cæsar, when he entertained the Romans with magnificent spectacles, covered the amphitheatre with awnings of *sericum* to shelter them from the sun. (Vide Macpherson’s Annals of Commerce, Vol. I. p. 138.) This, no doubt, was the cloth called *tautbund*, which Mahomed Cazim states was used for tents and *khenauts* (or the outer walls of tents).

Ammianus Marcellinus describes the Seres, as people of a most peaceable disposition, as most frugal or provident in their habits, and as shunning intercourse with the rest of mankind. Their mode of carrying on traffic, as mentioned by him, is similar to that described by Pomponius Mela, and Pliny. He states, that when strangers crossed the river to purchase thread or other commodities, the Seres carried on trade with them without interchanging words, and estimated the value of the merchandize offered for sale by inspection alone—disposing of their own goods [by bartering them for articles of country produce] but declining to buy foreign commodities in return. Solinus writes, “Primum eorum fluvium mercatores ipsi transient, in cujus ripis nullo interpartes linguæ commercio sed depositarum rerum pretia æstimantes sua tradiunt nostra non emunt.” The river, on the banks of which the traffic here alluded was carried on, appears to have been the boundary line between Bengal and the country of the Seres. It is apparently the same river, which Pliny designates *the first* in the country of the Seres, and it may be regarded, therefore, as having been the frontier one: (Primum eorum noscitur flumen Psitaras.) It appears to be a river in the Rungpore district, and is perhaps the Tistha. The Seres here mentioned are some of the hill tribes bordering on Sylhet and Assam, and the thread, which the strangers or foreign merchants purchased from them, was, no doubt, the Tassar or Muga silk thread of the latter country, &c.

Ammianus Marcellinus alludes to other articles of merchandize besides the thread which the Seres bartered. They comprised skins and iron, and, in all probability, lign-aloe, musk, lac, hair-chowrees, and rhinoceros’s horns.

Skins.—Pliny mentions that the Seres exported skins and iron along with their cloths. These skins are mentioned under the name of *ζηνικα δερματα* in the Periplus. They evidently refer to the rhinoceros and buffalo hides of Assam, from which the Sylhet shields are made, and which are celebrated throughout India, both on account of their strength, and the fine polish which is imparted to their surface by the juice of the *Semicarpus anacardium*. The Romans in all probability imported these hides for the manufacture of their shields.

Iron.—The iron of Serica was considered the best in India (*Ex omnibus generibus palma Serico ferro est. Seres hoc eum vestibis suis pellibusque mittunt. Secunda Parthico, neque alia genera ferri ex mera acie temperantur, ceteris enim admisceantur*).^{*} Assam and the adjacent countries abound in iron. Dr. Buchanan states that “at Doyang, south-west from Jorhat, a day’s journey, there is an iron mine which is wrought on account of the king. It supplies the whole country with abundance.”[†] Speaking of the places where iron ore is dug out by the Khassias, Lieut. Yule remarks: “so numerous and extensive are the traces of former excavations, that judging by the number at present in progress, one may guess them to have occupied the population for twenty centuries.”[‡] Malte Brun mentions that “Assam is celebrated for its steel.” This refers to the *daos* that are manufactured by the hill tribes, viz., the Nagas, Abors and the Khamtis.

Chowrees.—The fly drivers made of the long glossy hair of the tail of the Yak (*Bos grunniens*) appear to be the articles mentioned under the name of *Capilli Indici* in the Digest. A chowree was one of the insignia of royalty among the ancient Hindoos, and was used in Persia for the fringed knots called Kirtas, which are generally ornamented with gold, and hung round the necks of horses, as a charm against fascination. The Chinese make tufts of it for their caps, and the Turks adorn their military standards with it. Chowrees have always been an article of importation into Rungpore and Assam from Bootan and Thibet, and no doubt, they formed one of the exports from the Gangetic mart of the Periplus. Ælian mentions the long bushy tail of the Yak, and it may, therefore, be concluded that it constituted the *Capilli Indici* specified

* Pliny, Lib. XXXIII. C. XIV.

† Martin’s Eastern India, Vol. III. p. 660.

‡ Journal Asiatic Society, Vol. XI. p. 853.

in the Rescript of the Roman emperors relating to the articles imported into Egypt from the east, and contained in the Digest of the Roman Law, Lib. XXXIX. title XV. 5. 7.*

Lign Aloe.—The fragrant wood called Lign Aloe or Aguru in Sanscrit, is the Ahaloth of Scripture, from which term the name of Agallochum given to it in the Digest, is derived. Hence the modern appellation of Agal or Eagle wood which is sometimes applied to it. Aquillaria Agallocha, which yields this substance, is common in the mountainous country between Sylhet and Assam. Speaking of the latter country, Mahomed Cazim observes: "the mountains of Nanae (the Naga hills or Nazavicium of Ammianus Marcellinus) produce plenty of Lign Aloes, which a society of natives import every year into Assam and barter for salt and grain." The fragrance of Lign Aloe is supposed to be the result of a diseased state of the centre layers of the wood, which is converted into a resinous matter. At Sylhet an essence or *attar* is extracted from it, which, in former days when this article was in great demand, was sold for its weight in gold. Both the wood and the essence or attar are purchased by Moghul merchants and are sent to Jidda and Bussora. The attar of Lign Aloe, which is of the consistence of thick oil and of a dark brown colour, appears to be the substance called Indian Cinnabar by Arrian. Dr. Vincent remarks in speaking of Arrian's account of Socotra: "it is remarkable that aloes are not mentioned by the author of the Periplus but he notices particularly the drug called Indian cinnabar which exudes from a certain species of trees. Dr. Vincent says that the confounding of Cinnabar and Dragons blood was a mistake of ancient date, and concludes that the latter is the article that is referred to."† It would seem, however, that the substance, which Arrian alludes to, was not the produce of Socotra, but of India, and it is likely, therefore, that the attar of Lign Aloe is, from its colour, the substance that is meant by the article Cinnabar which exudes from certain trees. It was no doubt imported into Socotra from India. Lign Aloe is highly esteemed as a perfume throughout the east, and is employed for various purposes, as incense in temples, to fumigate apartments, cloths, &c. The Jews used it at their interments.

* Quære, Tit. IV. ? where a long and highly interesting catalogue of oriental imports is given.—*Eds.*

† Vincent's Periplus.

Rhinoceros's Horn.—This appears to be the article which is mentioned under the term *ῥινόκερως* in the *Periplus*. The Rhinoceros's horn was considered an antidote to poison, and was, therefore, highly valued in ancient times. These horns were no doubt exported from Assam where the Rhinoceros abounds. The horn of the Rhinoceros of Bengal was considered superior to that of every other country of Asia. Linschoten remarks that this was owing "to the herbs which Bengala yieldeth, for in other places they were not near the price of these." The two Mahomedan travellers of the 9th century state that the Chinese purchased the horns of Rhinoceroses in the kingdom of Rami, in the fens of which country they are said to abound (the marshes of Bengal) and that they adorned their girdles with these, some of which were valued at 3000 pieces of gold in China.

Tabasheer.—This is supposed by some to be the *μελι καλαμινον* of the *Periplus*. It is designated the sugar or manna of bamboos. It occurs in the works of the old travellers under the name of *Spodium de Canna*. Barrett mentions it as an export from Bengal to Goa in the 16th century. It is also noticed, as an article of traffic in other parts of India. Cæsar Frederiek remarks: "From Cambara cometh the *Spodium* which congealeth in certain canes (bamboos) whereof I found many in Pegu, of which I made my house there, because as I said before they make their houses there of woven canes like mats." Odoarius, who travelled in India in the early part of the 14th century, speaks of canes named "Casam, of which they make sails (masts) for ships, and in which are found certain stones, one of which stones whosoever carrieth it about with him cannot be wounded with any iron, and therefore the men of the country for the most part carry such stones wherever they go." (Hakluyt's voyages, p. 162.)

Dacca, 16th April, 1846.

APPENDIX.

NOTE I.

SIR WM. JONES mentions "the similarity of some proper names on the borders of *India* to those of *Arabia*, as the river *Arabius*, a place called *Araba*, a people named *Aribes* or *Arabies* and another called *Sabi*." (Discourse on the Arabs, *As. Res.* Vol. ii. p. 7.) Words allied to the latter term occur in Ptolemy's *Geography* of the countries of *India*: and were perhaps the names of Sabæan commercial settlements. *Supara* or *Sippara* (the *Sefareh* of Arabian

geographers : Vide D'Anville) between the ancient Tyndis and Muziris on the western coast of India, is supposed by one learned author (Lucas Holsterius ad Ortel, p. 137, quoted by Cellarins) to have been the Ophir of Scripture. The *Sabaræ* occupied a country corresponding in situation with Sumbulpore, the river Adamas (so named from its containing diamonds) which flowed through it, being the Mahanndee. *Sabar*, in the vicinity of Dacca, is regarded as a place of great antiquity by the natives ; it is situated in that part of the district which was the original seat of the fine muslin manufactures, and was in all probability an emporium for these fabrics and for the lign aloes, cassia, spikenard, and musk of Sylhet, Assam, and Bootan. *Sabara*, from which the Sabarieus Sinus took its name, is referred by D'Anville to Pegu, where the Irrawaddie enters the sea. *Saba* or *Sabana Emporium* was situated at the southern extremity of the Golden Chersonesus, and apparently in Malacca. The *Sabadibæ* (or islands of Saba) are perhaps Sumatra and Java. All these places, it may be remarked, are celebrated for their products ; and they were, in all probability, the sites of emporia from which the Sabæans derived the precious stones, the gold, the fine garments, the perfumes, and the spices, with which they supplied Egypt, Judæa, and the countries of the West.

NOTE II.

DR. BUCHANAN supposes that the Hindoo Princes of Bengal continued to govern at Sonargong, long after they had lost possession of the western portion of their kingdom, and that this part of the province was not annexed to the dominions of Mahomedan conquerors of the country until the time of Ferid-Addeen Soor Shere Shah. It is well known, however, that there were Mahomedan governors of the eastern division of Bengal prior to the reign of Shere Shah, and that Sonargong was in subjection to them, as early as the year 1279. It is probable, indeed, that there were Mahomedans in this part of Bengal, at a period long anterior to the conquest of the country by Bukhtyar Khulijy in 1203. We are told that the Arabian merchants of Bussora carried on an extensive maritime commerce with India and China, as early as the 8th century, and that many of them settled in the countries which they visited. Dr. Robertson, in speaking of Mahomedan traders in the east at this time, states : "They were so numerous in the city of Canton, that the emperor (as Arabian authors relate) permitted them to have a Cadi or Judge of their own sect, who decided controversies among his countrymen by their own laws and presided in all the functions of religion. In other places, proselytes were gained to the Mahomedan faith and the Arabian language was understood and spoken in almost every sea port of any note." (Robertson's Ancient India, p. 102.) There is reason to believe from this circumstance, that Bengal was the seat of a colony of Mahomedan merchants at this early period. This may be

inferred from the extensive commerce it enjoyed with countries of the west from early times; from the great value of its products, and above all, from the distinct allusion made to it by the two Mahomedan travellers of the 9th century. It is mentioned by them "as the country of a king named Rami, who possessed a great number of elephants. Its exports consisted of fine cotton garments,* lign aloes,† sable skins,‡ and Rhinoceros horns, all of which were to be purchased for shells,§ which were the current money of the country."

NOTE III.

The city of Bengala is mentioned in the works of geographers in the early part of the 17th century. Cluverius describes it as situated on an island of the river Cosmin, and as a mart from which there was exported valuable merchandise, consisting of silk, cotton, civet, sugar, &c. "*Urbs Bengala magna, celeberrimo imperio insignis, in insula fluvii Cosmin sita est. [Urbs Bengala una ex præstantissimis Indiæ est, ubi omnes reperiuntur deliciae quas ceteræ optimæ possident Europæ civitates. Hinc exportantur merces pretiosæ, Sericum, xylinum, zibettum, Saccharum, oriza, cannæ de Bengala, vulgo cannæ Hispanicæ dictæ].*" Vide *Introduct. ad Univers. Geograph. Philip Cluverius*. In the *Lexicon Universale* of Hoffman it is mentioned as a city of Extra Gangetic India, and as a large and celebrated mart frequented by Europeans: "*Bengala urbs Asiæ cum regni cognomine in India extra Gangem, sub imperio M. Mogolis a multis annis, ad ostia Cosmini fluvii non longe ab ostiis Ganges. Ampla et percelebre ab Europæis frequentata.*" That the Cosmin is the Brahmaputra is evident from the situation assigned to the former in the maps of the older geographers. Cluverius delineates it as running from the north-east, and dividing into two branches, on one of which he places the cities of Bengala, and Chatigan: the other branch, he represents as falling into the sea at Pegu. In a map attached to Bernier's Travels, Cosmin is laid down in a situation also corresponding with that of the Brahmaputra. Dacca is placed at its mouth, where the Megna joins the sea: and Chatigan at some distance from it towards the south. In a map by Mandelso, who travelled in India in 1639, the city of Bengala is laid down in the situation here assigned to Dacca; viz. at the mouth of the river. Bengala is described in the *Dictionnaire Historique* par M. L. Morery, as a city lying "sur l'embouchure du fleuve Cosmin, grande, belle, riche, marchande, et comme le centre du commerce des Indes, extrêmement fréquentée par les Européens, Français, Anglais, Portugais, Hollandais, &c. qui y ont tous le libre exercice de leur religion. Elle n'est pas éloignée de l'embouchure du Gange." The author, however, concludes by stating: "Quand j'ai parlé de la ville de Bengale, j'ai suivi le sentiment de presque tous les auteurs qui ont écrit avant

* Dacca muslins. † Aggur wood. ‡ Otter skins? § Cowrees.

moi : mais de nouvelles ? relations m'apprennent qu'il n'y a point de ville de ce nom." The site of Bengala appears to have been confounded with that of Chittagong about the beginning of the 18th century. In some of the French geographical Dictionaries of that period, these towns are described as "Chatigan sur la rivière de Cosmin vis-a-vis Bengal que plusieurs geographes confondent avec elle. Quelques uns ont cru que Bengale n'est autre que Chatigan." Dict. de Lamartine. That they were different places, however, is evident from the circumstance of Bengala, Chatigan and Satigan being severally mentioned as the chief emporia of Bengal. From the city of Bengala being described as situated on an island and opposite to Chittagong, Sundeeep would seem to be the locality that is referred to ; on the other hand, Sir T. Herbert mentions this island, but does not allude to any town upon it, whilst he particularly specifies Chatigan, Bacola, Serripore, and Sonargong as the principal towns of the eastern part of Bengal. In a work entitled "*Lex Mercatoria*," written about the middle of the last century, Dacca is mentioned as identical with Bengala. The mention by Morery of the latter having been frequented by Portuguese, Dutch, English, and French, seems to countenance this opinion ; but on the other hand the insular situation of Bengala, and its being placed opposite to Chittagong prove that Dacca is not the town that is referred to. Rennell, speaking of this city, remarks "no traces of it now exist. It is described as being near the eastern mouth of the Ganges, and I conceive the site of it has been carried away by the river."



Note on an Image of Budha found at Sherghatti, &c. by Capt. KITTOE.

I have the pleasure herewith to transmit a sketch of a small image of Budha at this place, and said to have been brought from a hill near Gaya.

It will be observed to differ in some respects from the ordinary form of these idols ; it appears to hold a cup for offerings, instead of the right hand resting open on the knee, as generally found, but it is common in this district, as well as other forms which I propose treating upon on a future occasion.

It will be observed that on the right beneath the "Sinhasun," or throne, is represented a monkey ? on his hind legs, holding an offering in his fore paws ; on the left, the same animal appears to be jumping down a well. This I have also seen on a fine figure of Budha at Budh Gaya, given in Buchanan, but badly drawn. Probably Lieut. Latter, who has already offered the Society some useful observations on Buddhist emblems,

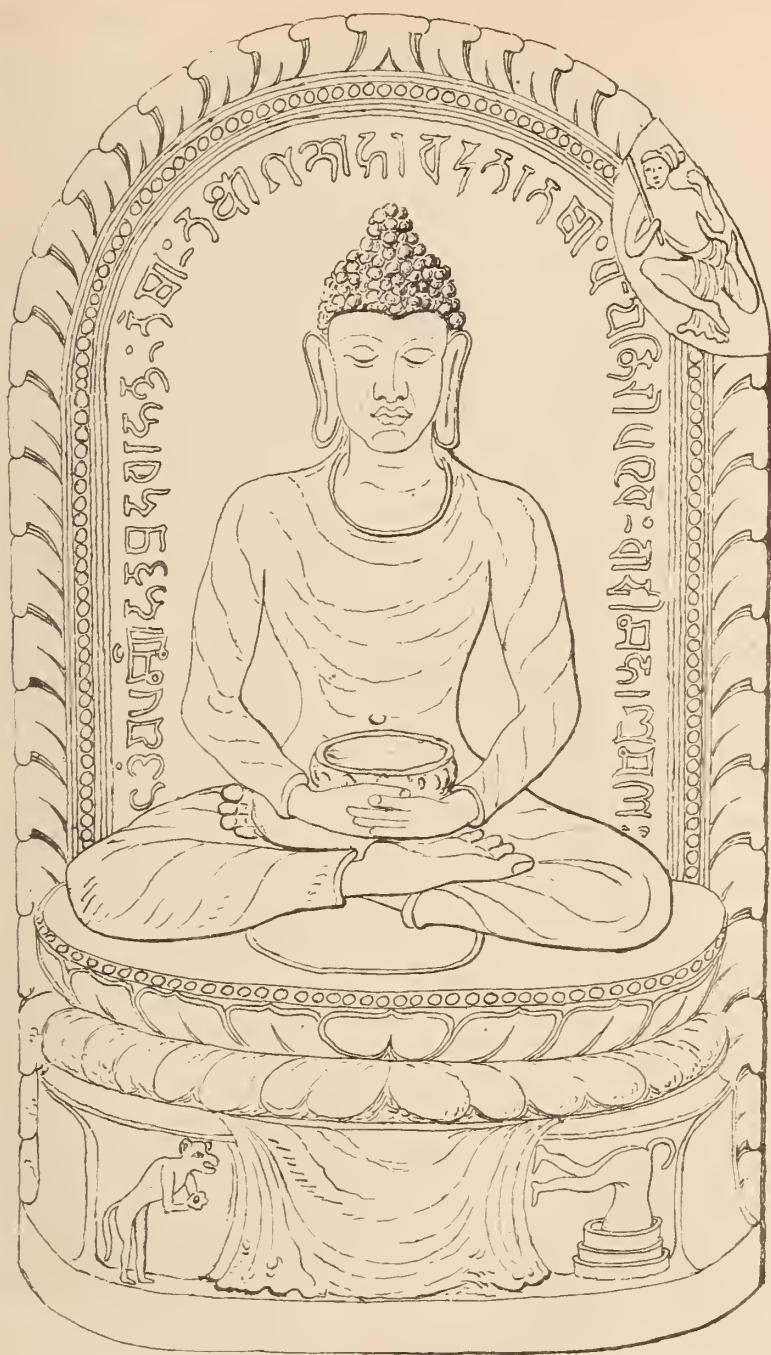


IMAGE OF BUDHA AT SHERGHATTI.

might be able, with the help of his Burmese savans, to throw some light upon the meaning of this curious representation, as well as of others I hope to furnish.

The workmanship of the figure is superior to the ordinary run; its material is black chlorite. The measurement is 15 in. \times 9 in. and has been worshipped for years past as Bhyrub by the ignorant people of this town; but this occurs everywhere, as remarked upon by Buchanan.

I have given the inscription in a line by itself with the Deva Nāgri context immediately above it for comparison; * it is the same, excepting perhaps orthographical errors, as given in page 133, Vol. IV. of the Journal, and occurs on almost every image in this district, and in various types, down to No. 2, of the Allahabad column, called the Gupta by Prinsep.

I hope soon to have it in my power to offer the Society further specimens of fragments of Buddhist sculpture met with in such abundance in this district, and should you think them of sufficient interest, I would not object to draw them on transfer paper ready for printing and publishing in the Journal.

I beg to announce to the Society that having lately had a few days' leisure I have visited several of the spots held sacred in the vicinity of Gaya, and have made several curious discoveries which may prove of interest to those who make the former usages and religion of this empire a study.

It would take much more space than I can afford or would attempt to fill, in a letter which is intended as a simple announcement, to describe what I have seen, and explain the conjectures it has led to, so as to be well understood—suffice it to say, I have found what I consider to be remains of the famous Chaitya, or temple raised by Asoka at Budha Gaya; they consist of a number of columns on which are very rude though interesting sculptures in bass relief in medallions. I have sketched all that seem worth recording; the subjects are chiefly the worship of the Bo tree, the lotus, the shrine or Chaitya, a goat, a female figure with the head of an ass, &c. There are also winged lions, oxen and horses, and a centaur. The simple bull is oft repeated, and a cow and calf—but this last appears to be of a later date. It is remarkable that these pillars are of the same stone as that of the Asoka columns of Dehli,

* As there is no room to insert this in the plate we here subjoin the Deva-nāgarī transcription.—*Eds.*

ॐ धर्मो रक्षति रक्षितः ।
हेतुप्रदवा हेतुं तेषां तथागता ह्य वदन् तेषां च यो निरोध एव
वादी महा श्रमणः ।

Allahabad and others; and here I must not omit to mention that one of these, or rather part of one was many years ago set up in Sahibgunj as a landmark by a Mr. Boddam; it was brought from Bukrow's (the site of an ancient city opposite Budha Gaya) where the lower portions still remain, the dimensions of this column must have been the same as of the others abovenamed. There is a sentence on most of the sculptured pillars ending with ऽ॥ "danam," or "the gift of," like those of the Bhilsa Tope in the early character, but the middle letters being much worn I cannot make it out properly; the initial letter is the same in all ऽ the á; it seems to be ऽá, ऽyá, ऽyé, ऽkoo? ऽ• Ñ gi, ऽyé, ऽda, ऽ• nam, the language seems to be Páli or Práerit and no sense can be made of it—but it must be the name of a person making a gift—perhaps Géya may be the dative of Gaya, when it would read "the gift to Gaya of"—but it is unimportant otherwise than the characters fix the date.

I have visited a spot called Koorkihar, the site of an ancient city and of a Budha monastery or Vihara, hence the name which has been no doubt corrupted from Koorka Vihara: there are innumerable idols chiefly Budhas, some of great size and very beautifully executed, and well worth removing to the museum and sending home. Amongst other things are a vast number of miniature Chaityas or Budha temples, from 8 inches to several feet; these are noticed by Buchanan when speaking of Gaya; but they are more plentiful here and at Budha Gaya than elsewhere. I have collected some, but none are entire; they will form subject for special notice hereafter.

There is a large Budha temple at Pornaha in ruins, but sufficiently entire to enable a good plan to be made of it, which I hope to be able to accomplish.

I have discovered a great many inscriptions at Gaya proper, and have taken impressions and copies, but they are not, as far as I can judge, of much interest; however they mention the names of many of the Pál rajás of Bengal and give dates. When I shall have prepared good copies I shall send them for the Society's inspection—and if considered acceptable I shall be happy to present duplicates.

This province offers a wide field for research. I have heard of several places worth visiting, but my time and means are small. There is one place called Pawnpoori which is said in one of the poorans to be the capital of Chundra Gupta; this I shall try and visit.



PROCEEDINGS
OF THE
ASIATIC SOCIETY OF BENGAL,
JANUARY, 1847.

The usual monthly meeting was held on Wednesday evening, the 13th January.

The Hon'ble Sir J. P. Grant, in the chair.

The Proceedings of the previous meeting were read and confirmed.

Dr. Duncan Stewart, Presidency Surgeon, was ballotted for and duly elected a member.

The following gentlemen were proposed for ballot at the February meeting :—

Captain Ousely, proposed by Colonel Ousely, seconded by Mr. Piddington.

Captain Munro, Brigade Major, Fort William.

J. Muller, Esq. Mint.

R. Jones, Esq. Professor Hindu College.

W. M. Dirom, Esq. C. S.

Baboo Debendernath Tagore.

Dewan Hurreemohun Sen.

Proposed by Dr. W. B. O'Shaughnessy, seconded by the Hon'ble Sir J. P. Grant.

The Senior Secretary read a Report on the part of the Committee of Papers on the Society's affairs.

Resolved, That the Report be received and printed for circulation among the resident members, prior to the discussion at the February meeting of the propositions it contains.

The following gentlemen were elected members of the Committee of Papers to supply vacancies :—J. W. Colville, Esq. Advocate General,

W. Grey, Esq. C. S., Welby Jackson, Esq. C. S., and R. W. G. Frith, Esq.

Read translation of a letter received from Professor Lassen, as follows :—

To Dr. E. ROER, Co-Secretary, Asiatic Society, Oriental Department.

MY DEAR SIR,—In conveying to the Asiatic Society my grateful acknowledgments for the valuable present they have favoured me with, and for their interest in my pursuits, I would request you to offer to the Society my apologies for the delay in my reply, owing to a severe affection of the eyes, from which I have been suffering during this whole summer, and which prevented me from engaging in any literary undertakings.

I was long since aware of the importance, nay of the indispensability of Radhakant's Dictionary for my labours, without, however, seeing a chance of making use of it, and my gratitude to the Asiatic Society, is the more cordial and sincere, since by their favour I have at last obtained access to this mine of Hindu learning.

Being anxious publicly to record my thanks to the Society, I shall consider it a particular favour, if you will ascertain, whether the Society would accept the dedication of my work on *Indian antiquities* to them. I was by my disease unfortunately compelled to desist during last summer from my labours, but I hope I shall be able to finish the latter half of the first volume in the course of the next spring.

By your translation of the Vedanta Sara, which I already knew from No. 158 of the Journal, you have acquired a lasting merit for the correct interpretation of this work, the meaning of which had been entirely misconstrued by the two former translators. You give, I apprehend, even too much praise to the German, by calling him a good Sanscrit scholar; his grammar and anthology contain many errors, and do not speak well of the critical sagacity of the author; his works are still more perverted by the circumstance, that he mixes up with all his labours Schelling's philosophy which he does not even correctly understand.

I most sincerely thank you for your offer to have, with the consent of the Society, some of the manuscripts of your Library copied for me, and I shall take the liberty to avail myself of it on any occasion I may require it. The works I should wish to have copied before all others, I am afraid, are not in the Library, at least not in the printed catalogue, viz. the *Prātisakhya* and the works of Aryabhutta. The latter, I believe, are only procurable in Malabar, since I find only one single notice of one of them in the catalogue of the Mackenzie collection, where mention is made of a manuscript in Grantham writing. The first title includes three works, manuscripts of which are found in London, and in Chambers' collection in Berlin; they are grammars of the Veda dialect, more ancient than that of Panini, and for this reason of great importance. If you will not consider me rude, I shall be much

obliged to you, if you can procure for me the two last Adhyayas of Bhaskara's Siddhanta Siromani. I have the first two Chapters, but never succeeded in obtaining the two remaining parts.

I am, &c.

C. LASSEN.

Read a letter from Dr. Roer, Co-Secretary in the Oriental Department, proposing the removal of the Pundit on the grounds of incapacity for his duties—referred to the Committee of Papers.

Presented a paper on the Coins of the Independent Mussalman sovereigns of Bengal, by J. W. Laidlay, Esq.

Ditto, on the *Ovis ammonoides* and a new species of Tibetan antelope, with drawings, by B. H. Hodgson, Esq., Darjeeling. Both these papers appear in the present number; the drawings illustrative of Mr. Hodgson's article are in the artist's hands and will be published with the least avoidable delay.

Read the following letter from the Secretary to Government, N. W. Provinces, forwarding drawings of some remarkable cave temples lately discovered in the Mirzapore district.

No. 1182.

From J. THORNTON, Esq. Secretary to Government, N. W. P.

To the Secretary Asiatic Society, Calcutta.

Genl. Dept.

Lieut.-Governor's Camp, the 19th December, 1846.

SIR,—The Hon'ble the Lieutenant-Governor, having heard of certain cave Temples in the vicinity of the hilly tracts south of Mirzapore, has taken steps to procure drawings of them through the Agency of Captain Stuart, Fort Adjutant of Chunar. His Honor has now desired me to transmit to you a copy of a letter received from that Officer, dated 3d ultimo, together with the original plans and sketches which accompanied it, and to request that you will place them at the disposal of the Asiatic Society for publication in their Journal, or for such other notice as they may be considered to deserve.

I have the honor to be, Sir,

*Lieut.-Govr.'s Camp,
the 19th December, 1846.*

Your most obedient servant,

J. THORNTON,
Secretary to Government, N. W. P.

(Copy.)

To J. THORNTON, Esq. Secretary to the Government, N. W. P. Agra.

SIR,—With reference to your letter No. 1106, of 26th December, 1845, requesting me to procure all the information I could regarding some Cave Temples lately discovered in the Hilly tracts south of Mirzapore, and sanctioning a certain amount of outlay, for their preservation, I have the honor to state that I have this day

forwarded by Dawk Banghy for submission to His Honor the Lieutenant-Governor, a set of plans and drawings executed by Mr. C. H. Burke, late of the Revenue Survey Department, deputed by me to visit the Caves for that purpose, which I feel assured will be considered highly satisfactory as well as creditable to Mr. Burke's industry and talents.

2. The Caves are three in number, called the Beeah Mandah Rownah, Mandah, and Chargoodee. They are situated in Talooqah Shapore, Singrowlee, Purgunnah Burdee, which at the period of the Benares settlement was a small independent Raj held by a branch of the Chundels of Agoree Burhnr (vide Regulation II. of 1795, Section 17) but was subsequently absorbed into the Rewah state by an arrangement between the Rajahs of Rewah and Burdee, the latter of whom made over his sovereignty to the former in exchange for a pension.

3. The country near the Caves is very inaccessible, being nothing but a succession of rocky hills covered with dense jungle, containing a few miserable villages inhabited by wild aboriginal tribes, from whom no information of a satisfactory nature can be obtained; the Caves themselves are avoided with superstitious dread by the few remaining inhabitants, and are utterly abandoned to the wild beasts of the forest.

4. The only answer given to queries on the subject is that they were constructed by the Balund Rajahs, a family of the Klurwar tribe, who held the sovereignty of Agoree, and Singrowlee, till expelled by the Chundels, who emigrated to this part of the country from Mohobah, somewhere about the year 1190, A. D. and obtained possession of Agoree, &c. by expulsion of the Balunds about 50 years subsequently.

5. The representatives of the Balund Rajahs still reside in a village of Shapore Singrowlee, called Mirwas, and although dispossessed for nearly 600 years, still entertain a hope of one day being restored to their possessions. It is said that they are under a vow never to bind on a turban till the day of restoration.

6. Some ruins of wells and brick buildings, as well as a Fort, are found in the Nilour hills, near a small village called Benowlee, 12 miles N. W. from the Caves, which is said to have been the ancient capital of Shapore Singrowlee, and the last strongholds of the Balunds, before their final expulsion, but no other remains are to be found indicating the former existence of a people capable of constructing such stupendous works.

7. A small sketch map accompanies the drawings, showing the relative position of the three excavated Hills, which are situated from 10 to 14 Koss south of the most remote part of the Mirzapore district.

I have, &c.

(Signed) W. M. STUART.

Chunar, 3d November, 1846.

(True Copy)

A. SHAKESPEAR,

Assistant Secretary to Government, N. W. P.

On the proposal of the Lord Bishop of Calcutta, seconded by Mr. Colville, Advocate General, the respectful thanks of the Society were voted to the Hon'ble the Governor of the N. W. Provinces for the valuable communication and drawings above recorded. The drawings were referred to the Committee of Papers for consideration as to their publication.

Read two letters from Captain Kittoe, respecting Budhistical remains discovered by him at *Gaya*. Referred to the Committee of Papers.

Read the following letter from Captain Kittoe :—

To the Secretary Asiatic Society, Calcutta.

Sherghatti, 28th December, 1846.

DEAR SIR,—Some months ago I submitted a paper on the subject of the Kootub and adjacent ruins, but to this date I have received no reply or acknowledgment.

Being desirous of altering some parts of my paper, I request the favor of its being returned to me.

As an old member, and one who (as long as encouragement was offered by the acknowledgment of contributions) took much pains for the Society, I beg to propose that for the future all communications be formally acknowledged, and that it be considered a rule, secondly, that such papers as may not be deemed by the Secretaries and the Committee of Papers, suited to the Journal or Researches, may be returned to the contributor, with a letter to that effect.

I would, with deference, recommend that as the journal is now (I believe) published at the expense of the Society and is much in arrears, the Numbers should be brought up, if even the number of pages be reduced, for the interest in “proceedings” is lost from their now appearing several months after date—most contributors to Periodicals feel encouraged by the early publication of their papers.

I feel sure that such an arrangement and the publication of the latest proceedings would have a beneficial effect. I, for one, should feel pleasure in affording my mite of assistance in the Antiquarian, or Architectural branches, as well as illustrations in outline, such as I have proposed in another letter, only now forwarded, though mostly written long since.*

I remain, Dear Sir,

Your's faithfully,

M. KITTOE, *Captain,*

Member.

Read a letter from D. C. Mackey, Esq. Danish Consul, forwarding for the acceptance of the Society the *Memoires de la Societ  Royale des Antiquaires du Nord*, Section Asiatique.

* Captain Kittoe will be pleased to find that his excellent suggestions have been anticipated in the Society's recent arrangements.—*Sees.*

To W. B. O'SHAUGHNESSY, Esq. Secretary to the Asiatic Society.

SIR,—I beg to hand you an extract from a letter I have received from the Secretary to the Royal Society of Northern Antiquaries of Copenhagen, and for the aid of your Society in their Researches I am enabled to assure you of their most cordial co-operation in connection with any scientific pursuit in which their services can be made available.

I beg your acceptance of the accompanying three Nos. of the R. N. A. Society's proceedings which have already been submitted to you, and when I receive more they shall be laid before your Society.

I have the honor to be, Sir,

Your obedient servant,

*Danish Consulate,
Calcutta, 13th January, 1847.*

D. C. MACKAY,
Danish Consul.

Extract from Mr. Secretary Chas. Rafor's letter.

“On the formation of an Asiatic Section in our Society we have had in view the elucidation of the ancient monuments of Asia, which shall be the aim of our earnest exertions. In connexion with this object several works have been already commenced, among which we may here mention the Treatises on the connexion between Sanscrit and Icelandic (old Danish) whereof the first part is already printed, and on the decyphering on the second Achaemenian or Median species of arrow-headed writing by Professor N. L. Westergaard, the author of the *Radices linguæ Sanscritæ*, and the disquisition on the coins struck by the Buids, by the Rev. Jas. C. Lindberg, A. M. which we hope will meet with especial favour in Asia, inasmuch as our Cabinet is in possession of several hitherto unknown coins of this class.”

Read a letter from Lieutenant Strachey, promising a copy of the narrative of his recent tour to the lake districts of Manésarowar, for publication in the Society's Journal.

Mr. Laidlay read a list of coins, received by him from Mr. Torrens. Mr. Laidlay was requested to retain the coins in his charge, depositing a list with the senior Secretary for office record.

Read a letter from Lieutenant Wroughton, forwarding copy of an inscription which has been referred to the Oriental Sub-Committee for examination.

Read the accompanying note from Mr. Heatly, forwarding letters and publications from the Statistical and Ethnological Societies of London.

To W. B. O'SHAUGHNESSY, Esq. Secretary, Asiatic Society.

MY DEAR SIR,—I have the pleasure to place in your hand two letters from Mr. King, Honorary Secretary to the Ethnological Society, and Assistant Secretary to

the Statistical Society—together with a packet of publications from those Associations, catalogued in the accompanying lists. The latter are a donation to the Asiatic Society and intended to open friendly relations between the donors, and the cultivators of similar pursuits in this country.

Your's sincerely,

S. G. T. HEATLY.

Star Press, 13th January, 1847.

Statistical Society of London,

12, ST. JAMES' SQUARE,

22d October, 1846.

SIR,—I am instructed to forward to you a complete set of the Statistical Society's Journal, a Volume of its Transactions and six copies of its first series of questions, as well as all the forms we have in print, as a donation to the Asiatic Society of Calcutta.

I have the honor to be,

Your most obedient servant,

RICHARD KING,

Assistant Secretary.

To S. G. T. HEATLY, Esq.

27, Sackville Street,

21st October, 1846.

SIR,—I beg to enclose a set of the Ethnological Society's publications up to the present time, with the view of an exchange for those published by your Society.

I have the honor to be, Sir,

Your obedient servant,

RICHARD KING,

To S. G. T. HEATLY, Esq. *Asiatic Society of Calcutta.*

Honry. Secy.

Ethnological Society's Publications up to the present time :—

I. Ethnological Society, pages 1 & 2.

II. Queries respecting the Human Race, pages 3 to 14.

III. The study of Ethnology by Ernest Dieffenbach, M. D. pages 15 to 78.

IV. On the Ancient Peruvians, by Dr. De Tschudi, pages 79 to 102.

V. On the Biluchi Tribes inhabiting Sindh, in the lower valley of the Indus and Cutchi, pages 103 to 210.

VI. Address to the Ethnological Society of London, delivered at the anniversary meeting on the 25th May, 1844, by Richard King, M. D. Secretary, pages 7 to 40.

VII. Address to the Ethnological Society of London, delivered at the anniversary meeting on the 26th May, 1845, by Rear Admiral Sir Charles Malcolm, President, pages 41 to 62.

VIII. The Regulations and List of members of the Ethnological Society of London, 1843, 1844, pages I to 14.

Transactions of the Statistical Society of London, Vol. I. Part 1, 1837.

Journal of the Statistical Society of London, Vols. I. to X.

First series of questions circulated by the Statistical Society of London, 1836,
6 Copies.

16 Forms of Statistical Report.

The Librarian submitted the following list of Books received, and of Donations to the Society's General Museum:—

List of Books, &c. received for the Meeting of Wednesday, the 13th January, 1847.

PRESENTED.

- 1.—Meteorological Register kept at the Surveyor General's office—FROM THE SURVEYOR GENERAL'S OFFICE.
- 2.—Metcorological Register kept at Kyouk Phyoo during November, 1846.—FROM THE SURVEYOR GENERAL'S OFFICE.
- 3.—The Calcutta Christian Observer for December, 1846 and Jan. 1847.—BY THE EDITORS.
- 4.—The Oriental Christian Spectator for December, 1846.—BY THE EDITOR.
- 5.—An attempt to explain some of the monograms found upon the Grecian coins of Ariana and India, by A. Cunningham.—BY THE AUTHOR.
- 6.—Vedantic Doctrines Vindicated.—BY BABU RAJENDRALAL MITTRA.
- 7.—The Hindu Intelligencer, 5 Nos.—BY THE EDITOR.
- 8.—Contributions to Terrestrial Magnetism, by Lieut. Col. E. Sabine.—BY THE BENGAL GOVERNMENT.

EXCHANGED.

- 9.—The Edinburgh New Philosophical Journal, No. 82.
- 10.—Journal of the Agri-Horticultural Society of India, Vol. V. part III.
- 11.—Calcutta Journal of Natural History, No. 27.
- 12.—The London, Edinburgh and Dublin Philosophical Magazine, No. 194.

PURCHASED.

- 13.—Conchologia Iconica, from No. 13 to 36.
- 14.—Thesaurus Conchyliorum, by G. B. Sowerby, Jr. Parts 4th, 5th, 6th.
- 15.—The Classical Museum, No. XIII.
- 16.—The Annals and Magazine of Natural History, No. 119.
- 17.—Journal des Savans, Aout 1846.
- 18.—The Calcutta Review, No. 12.

DONATIONS TO THE MUSEUM.

- 1.—A Steel and Tinder-box used by the natives of Lahl and Kooloo, Donor—H. TORRENS, Esq.

- 2.—Model of a Chinese Plough, Donor—Major EDIE, H. M.'s. 98th Regt.
- 3.—Chinese arithmetical table, Donor—Major EDIE.
- 4.—Model of a Chain Pump used by the Natives of China, and adapted both for manual and cattle labour, Donor—Major EDIE.

For all the above communications and donations to the Society the thanks of the meeting were unanimously voted.

Dr. W. B. O'Shaughnessy exhibited specimens of explosive paper exactly like *talc*, prepared by dissolving the gun cotton in Sulphuric ether, and allowing the solution to evaporate spontaneously. He described also some singular electrical properties manifested by this paper.

REPORT.

At a meeting of the ASIATIC SOCIETY held on the 13th of January, 1847, the following REPORT on the Society's affairs was read and received, and directed to be printed, for distribution to the resident members, prior to the discussion at the February meeting of the several propositions it contains.

In compliance with the desire expressed by several members of the Society at the December meeting, the Secretaries, on the part and with the concurrence of the Committee of Papers, submit a succinct report on the state of the Society's affairs, and of the views of the Committee regarding the measures they deem best calculated to uphold its character and promote its utility.

The Society at present numbers 136 members, of whom 17 were admitted during the last year. No record exists of the withdrawals, deaths or other casualties by which the number of members has been reduced, a deficiency the Committee of Papers point out as one which the Secretaries should in future supply.

Of the 136 members there are not more than 100 who contribute with regularity to the Society's income. Two members have recently claimed exemption from the payment of subscription on the grounds of having been on the list for 20 years. As much doubt exists as to the expediency of admitting this claim for exemption, the Committee recommend the subject to the immediate consideration of the Society at large.

The Committee of Papers and Office-bearers as appointed in March 1846, consisted of—

Vice-Presidents.—The Lord Bishop of Calcutta, Sir J. P. Grant, Sir H. W. Seton, Lieut.-Colonel Forbes, and H. Torrens, Esq.

Secretary.—H. Torrens, Esq.

Committee.—Rev. Dr. Hæberlin, W. P. Grant, Esq., C. Huffnagle, Esq., G. A. Bushby, Esq., W. Tayler, Esq., Baboo Prosonocoomar Tagore, S. G. T. Heatly, Esq., W. B. O'Shaughnessy, Esq. M. D., and Capt. Broome, H. A.

Of these Messrs. Torrens and Huffnagle have permanently left Calcutta. The Hon'ble Sir H. Seton expresses himself unable from the state of his health to take any active part in the Society's business. Mr. W. Tayler has withdrawn, and Baboo Prosonocoomar Tagore has not been able to give his attendance or attention to our affairs.

In accordance with the long established practice of the Society to supply vacancies by annual election, it accordingly becomes necessary to elect members of the Committee of Papers in the room of Messrs. Tayler, Huffnagle, and Prosonocoomar Tagore.*

In consequence of the resignation of Mr. Torrens, Dr. W. B. O'Shaughnessy and Mr. J. W. Laidley were elected Co-Secretaries at the meetings of August and September, and Dr. Roer, a Co-Secretary in the Oriental Department, in November, 1846. Baboo Rajendra Lâl Mitra was also elected Librarian and Assistant Secretary at the November meeting on a monthly Salary of 100 Rupees, and for a probationary period of 6 months.

At the November meeting a Sub-Committee or section, was also appointed for advice and reference to all matters connected with Oriental literature. Of this Sub-Committee Major Marshall, the Rev. Mr. Long, the Rev. Dr. Hæberlin and Dr. Roer were appointed members, and Captain Latter was added to their number at the December meeting.

Finance and Accounts.

The Accounts not having been published for some years, the Secretaries and the Accountant have been engaged in the laborious task of examining all the receipts and vouchers since 1842, and comparing these with the abstract Annual Accounts received from the late Accountant,

* The following gentlemen have accordingly been elected at the Meeting of January, 1847, as members of the *Committee of Papers* to supply vacancies. Messrs. J. Colville, Advocate General, Welby Jackson, Esq. C. S., W. Grey, Esq. C. S., and R. W. G. Frith, Esq.

Mr. Bolst. This task is nearly completed and the results will be duly reported. Meanwhile the Committee of Papers recommend the immediate publication of the whole of Mr. Bolst's statements, for the information of the Society at large.

The Committee express their regret that these accounts have not been regularly printed in detail and circulated to the members, a step which would have obviated much misconception which has subsequently arisen.

A resolution having been passed at the September Meeting, directing the immediate payment of the Society's debts by the sale of Company's Paper or other available means, the following sums have been paid accordingly :—

For Mr. Bird's Portrait,	Rs.	1368	8	9
Mr. Blyth's Arrears of rent,		440	0	0
Messrs. Currie and Co. for almirahs, &c.		425	14	0
Messrs. Ostell and Lepage, (for books,)		122	4	0
Mr. Piddington, arrears of salary,		200	0	0
Baptist Mission Press,		418	0	0
Bishop's College Press,		5,867	11	0
Sundries,		2,285	7	2

Co.'s Rs. 11,127 12 11

And in compliance with further resolutions the sum of 3,000 Rs. has been reserved for the payment of Mr. Blyth's contingent claim,* making in all, paid and reserved to meet acknowledged debts Co.'s Rs. 14,127 12 11.

The produce of the back numbers of the Journal it is expected will be available for the liquidation of the debt of Rupees 1,500 due to Mr. Torrens—for the purchase of a Stock of the Journal, to that amount.

The Co-Secretaries having received from their predecessor Company's Paper, Value Co.'s Rs. 13,066 10 8

Cash Balance, 1,309 12 9

And subsequently collected on account of

Subscriptions, 553 6 0

And received from Government, 2,228 0 0

Co.'s Rs. 17,157 13 5

And paid or reserved as above detailed, . . Co.'s Rs. 14,127 12 11

* See *Proceedings for Nov. 1846.* p. lxxxviii.

it becomes their disagreeable duty to announce, that, reserving 3,000 Rupees due to Mr. Blyth and 1,500 Rupees due to Mr. Torrens, the actual Cash Balance in hand on the 30th of December, 1846, is Co.'s Rs. 1,530 0 6, of which 1,000 Rupees, the Government contribution for October and November for Oriental publications, must also be reserved for the special purpose for which it was granted, leaving a net balance of Co.'s Rupees 530 0 6 for the purposes of the Society, and which will be totally absorbed by the payment of the balance due on account of the "Burnes" drawings.

The Society's monthly income proceeds from the following sources :

The Government allow for

Oriental Publications, monthly, Co.'s Rs.	500	0	0
Museum of Geology,	250	0	0
Contingencies of museum of Geology,	64	0	0
Museum of Zoology,	250	0	0
Specimens,	50	0	0

Co.'s Rs. 1,114 0 0

This sum is clearly only applicable to the special objects for which Government allow it—and whatever misconception or irregularity in this respect may have hitherto taken place, it deeply concerns the character and even the existence of the Asiatic Society to insist on the future application of these grants, being strictly in accordance with the instructions of Government.

The Society further receives annually from Pay-

ing Members,	7,808	0	0
Subscription to Journal,	1,616	0	0
Average Sale of Publications according to last			
year's average,	755	0	0

Annual Co.'s Rs. 10,179 0 0

Monthly Income, „ 848 5 4

This Income is expended as follows :—

Assistant Secretary and Librarian,	100	0	0
Library Establishment,	52	8	0
Establishment of Zoological museum,	138	0	0
Curator's House-rent,	40	0	0

Secretaries' Establishment,	86	0	0
Contingencies,	10	0	0
Printing of Journal,	350	0	0
Miscellaneous printing,.....	90	0	0

Co.'s Rs. 866 8 0

Check and Audit.

The next subject to be considered is the regulation of the Society's expenditure, especially of such funds as it may hold in trust for special purposes from Government, from learned Societies, or munificent individuals.

Recent resolutions of the Society have been passed declaring the course the Society should in future pursue, but unless there be adopted a regular system of Check and Audit, we can never be certain but that funds granted for one purpose are applied to another, thereby leading to ill feeling, disunion and consequent loss of character to the Society.

The Committee therefore propose that the accountant be required to attend the monthly meetings with a Dr. and Cr. account, statement of dependencies and vouchers, and that the same be read at each meeting as a regular part of the proceedings of the month—that a balance sheet be published *once* in each year; that one period of payment be adopted and that within the first week after every monthly meeting; that at the monthly meetings all demands on the Society should be produced and the amounts if sanctioned entered on the proceedings, excluding of course the regular Establishments. The signing of cheques as well as the general business of the Society should further be conducted by one Secretary only—the office establishment being under his control, and in his absence by the Co-Secretary next in seniority of appointment. All correspondence moreover on the Society's business in every department should be signed or countersigned by the Senior Secretary and copies filed in his office.

The preceding summary of the accounts points out but too clearly, that the Society from its own means can at present do no more, than maintain the Journal, and provide for Establishments and Contingencies strictly on the foregoing scale—and it seems necessary to intimate to the Curators and other officers that it becomes their duty at present rather

to preserve existing collections than to incur any avoidable expenses in making additions to our Museums,—and that under no circumstances, short of a general vote of the Society, can the scale of “Contingencies” assigned by Government be exceeded in their departments.

Under this head it seems necessary to observe that the European temporarily engaged since November, 1846, as a night watch in the Society’s house, at 40 Rs. per mensem, has been discharged from the 5th inst. The native chokedars are retained; the Committee are of opinion that when the Society’s funds permit the outlay it will be indispensable to have a European keeper or porter resident in the premises. Such a man can be obtained on the guarantee of the Police Authorities for 40 rupees a month. It should be a part of his duty to accompany visitors through the rooms, and he should be entrusted with the special charge of such coins or other moveable articles of particular value as the Society may possess. Had such a person been employed for the last three years, it is not probable that we now should have to deplore the loss of the fine collection of coins and the gold medal of the Emperor of Russia of which we have been lately despoiled.*

PUBLICATIONS.

We have next to notice the important subject of the Society’s *Publications*, of which the *Journal* has first to be considered.

The Committee of Papers are unanimously of opinion that on the maintenance of the *Journal*, the regularity of its appearance, and the judicious selection of its contents, depend chiefly the usefulness and the reputation of the Society. Recent changes among the officers have interfered with its regular appearance, but measures are now complete for its issue in the 1st week of each month. The Committee append a list of the papers now in hand for their periodical, and the varied nature of these contributions and the known ability of the authors, hold out most gratifying prospects of this department of the Society’s labours proving creditable to themselves and beneficial to the public.

The monthly reports of Proceedings having been printed up to the close of 1846, but not issued since March, the Committee of Papers propose to distribute the whole at once this month, as a supplement to

* The members of the Committee of Papers have since this Report was drawn up retained at their own cost a retired European Sergeant strongly recommended to them by the Deputy Superintendent of Police, and who now resides on the premises.

the Journal, in the form of the series herewith submitted.* And in future they think it would be conducive to the utility of the Society to publish abstracts of the proceedings in the daily papers, as was done in former years.

Oriental Publications.

For this valuable object a sum of 500 Rs. per mensem, has been munificently granted by Government in the year 1838, and applied in strict accordance with the directions of Government till the close of the year 1840, and the mode of application duly reported to Government. From this period it appears on reference to the accounts published in 1842, for 1841, in the Journal Vol. XI. part I. p. 198, and rendered by Mr. Bolst, but not hitherto published from 1842 to 1846, that through some misunderstanding of the orders of Government, the greater part of the monthly grant has been applied to purposes which, however useful or important, were not contemplated in the terms of the grant. The expenses of the Zoological drawings by Sir A. Burnes, and of those of Dr. Cantor's Chusan Zoology, constitute the heaviest items of this irregular expenditure, being specified in Mr. Bolst's abstracts, under the head of "Oriental Publications," and amounting to Co.'s Rs. 6833 : 14 : 9, as follows :

1842. Paid J. Bennett for Sir A. Burnes' drawings, Rs.	650	0	0
Messrs. Ballin and Co. for do. do.....	2145	0	0
W. Rushton for do. do.	643	0	0
1843. Paid Mr. Bennett for Sir A. Burnes' drawings,..	200	0	0
Drawing paper for do.....	225	8	9
1844. Paid Mr. Bennett for Sir A. Burnes' drawings,..	18	0	0
Do. for Dr. Cantor's Chusan Zoology,	900	0	0
1845. Paid Mr. Bennett on account of Dr. Cantor's Zoo-			
logy,	800	0	0
Mrs. Ballin for printing,	261	6	0
Do. balance for Burnes' drawings,	68	4	0
1846. Paid Mrs. Ballin for lithographing Burnes' draw-			
(To July.) ings,	522	12	0
J. Bennet for Dr. Cantor's Chusan Zoology, ..	400	0	0
<hr/>			
Co.'s Rs. 6833 14 9			

* This has been done since the January meeting.

During the period in question the Society has published, or paid towards the publication of “Oriental” works:—

Paid for publishing Oriental works,	6,463	1	6
Do. for purchase of Oriental works, &c.	657	10	0
Do. Contingent charges for Do.	561	15	11
<hr/>			
Amount disbursed on account of Oriental Publications from 1842 to 1846,	Co.'s Rs.	7,682	11 5
Establishment for preservation of Oriental works, &c. from September to December 1846, @ 68 Rs. per month,		272	0 0
<hr/>			
Total Co.'s Rs.		7,954	11 5

Dec. 31, 1846.

While we have received during the same period at 500

Rs. per month for five years, Co.'s Rs. 30,000 0 0
leaving Co.'s Rs. 22,045 4 7.

Due by the Society to the account of the grant in question.*

The Committee of Papers have been led to this retrospective view of the subject of the Oriental publication grant by the circumstances which have followed the resolutions adopted by the Society at their meeting of November, 1846, and which gave rise to the annexed correspondence.

To G. A. BUSHBY, Esq.

Secretary to the Government of India, Home Department.

SIR,—I am directed by the Asiatic Society of Bengal to convey through you their most respectful solicitation that, in the future disposal of the means placed in their hands by Government for the promotion of Oriental literature, they may be permitted to defray from the monthly allowance of Co.'s Rs. 500, the expense of printing in the Society's Transactions and Journal all papers on the subjects named in the subjoined resolution—And also to meet therefrom the cost of preserving the Oriental works now in the Library, for which a monthly allowance of 78 Rs. long awarded by Government has been recently withdrawn.

I have, &c. &c.

(Signed) W. B. O'SHAUGHNESSY,
Senior Secretary, Asiatic Society.

* Of which Rs. 1,500, the amount received on this account since Sept. 1846, are in hand and available for the regular purpose according to the Government order.

Resolution adopted by a General Meeting of the Asiatic Society of Bengal, 4th November, 1846.

Resolved, that Government be respectfully solicited to permit the Society to defray from the monthly allowance of Rs. 500 for Oriental Publications, first, the expense of the custody of the works now in store (for which a sum of 78 rupees per mensem allowed by Government has lately been withdrawn) and 2d, the cost of publication in the Society's Transactions and Journal of all papers on Oriental literature, History, Antiquities, Geography and kindred subjects of research.

The following reply from Mr. Secretary Bushby, dated 21st November, 1846, was received after the meeting of December.

FROM G. A. BUSHBY, ESQ. *Secretary to the Government of India.*

Dated 21st November, 1846. Home Department.

TO W. B. O'SHAUGHNESSY, ESQ. *Senior Secretary, Asiatic Society.*

SIR,—“ I am directed by the Hon'ble the President in Council to acknowledge the receipt of your letter dated the 7th instant, conveying the solicitation of the Society, that in the future disposal of the means placed in their hands by Government for the promotion of Oriental Literature, they may be permitted to defray from the monthly allowance of Co.'s Rs. 500, the expense of printing in the Society's *Transactions* and *Journal*, all papers on Oriental Literature, History, Antiquities, Geography and kindred subjects of research, and also to meet therefrom the cost of preserving the Oriental Works now in the Library.”

2. “ In order the better to be able to decide on the Society's Application, the President in Council could wish to have before him a statement in detail of the manner in which the Government grant of 500 Rs. per mensem has hitherto been appropriated.”

3. “ His honor in Council remarks that the conditions of the grant have not been fully carried out by the Society. One of these conditions was that an Annual Account should be rendered by the Society of the manner in which the Government donation had been expended. This seems to have been lost sight of, for the only account current rendered by the Society is that forwarded with your letter dated the 13th January, 1840.”

4. “ Again it should be shown how the wish expressed by the Hon'ble Court of Directors in regard to the printing of the text of the Vedas, with a commentary, has been kept in mind, and what may be the purpose of the Asiatic Society in regard to the publication of this important Record.”

5. The President in Council will on receipt of the statement above called for, be better prepared to judge of the manner of the past appropriation of the Government grant, and to decide on the present application of the Society.

I have, &c. &c.

(Signed) G. A. BUSHBY,

Secretary to the Government of India.

Council Chamber, the 21st November, 1846.

On receipt of Mr. Bushby's letter the Secretaries, then but recently elected, made the requisite examination of the accounts, with the result set forth in the foregoing sketch, and which correspond with the general statements previously made by the Sub-Committee of Finance, but unintelligible because unaccompanied by details.

The Committee of Papers regret deeply that any portion of the Oriental Publication Fund should have been used for other purposes, and they consider the Society bound to acknowledge the sum so used as a debt to Government, but one of which the present state of their pecuniary affairs, renders it impracticable for them to offer immediate payment. In partial extenuation of the irregularity, the Committee refer with some satisfaction to the magnificent Zoological collections, to the procural of which no small portion of the fund has been directed, to the very large contributions made to the Museum of the India House—and to the additions to their buildings, and the gathering together of suitable monuments in their Hall to the great men by whose labours the Asiatic Society has gained such fame, as the patrons and promoters of Oriental, Literary, and Antiquarian research. The Committee too would represent to Government that for 58 years previous to this grant the greater part of their funds has been expended on the publication of researches of the same, or an allied nature, and in the promotion of every branch of antiquarian investigation. Having at least disbursed more than two lacks of Rupees in this pursuit, the Committee trust that Government will look indulgently on the irregularity which has occurred. They would state that it was in no small degree caused by the indifference of the few Oriental Scholars among us during the period under review to the editing or publishing of works of acknowledged importance. They would express the resolution of the Society—to watch carefully over the future application of the grant, and to refer regarding this on all occasions to the advice of the section of eminent Orientalists already appointed for the purpose.

Meanwhile the question of the mode of publication of the Vedas has been referred to the Oriental Sub-Committee, who are as yet unprepared with their Report. The Rev. Dr. Hæberlin has recently intimated to the Committee that he is publishing the *Smritis* under the Society's authority, and that the whole of the grant for 1847 is thus forestalled. But as the records of the Society contain no evidence of this publication having been duly authorized, and as it appears that the greater portion of the *Smritis* have already been published by a Native Editor, the Committee recommend that the work be not further proceeded with, until the Vedas are finished.*

Lastly, with reference to Mr. Bushby's letter, the Committee of Papers suggest that, should their views meet the approbation of the Society, the Secretaries be directed to draft a reply in corresponding terms and submit the same to the Committee for revisal, and that in this reply the Society should, under the circumstances now elicited, beg the permission of Government to withdraw their former application.

The financial difficulties above specified render it obviously impracticable to carry out the Society's resolution to print Colonel Everest's Trigonometrical observations, as a volume of Transactions. It becomes equally impossible to proceed with the "Burnes" drawings.

Of these there were in all. 146

These have been lithographed and coloured, 50

Fishes, 20

Mammalia, 9

Birds, 14

Reptiles, 7

50

Those completed have cost Co.'s Rs. 5682 1 6

Paid, 5,082 1 6

Due, 600 0 0

5682 1 6

To finish the *whole* as directed by the Society in 1841,† would cost

* A proposition on this subject received from the Rev. Dr. Hæberlin on the 28th January will be submitted to the next meeting.

† See Vol. XIII. Part 2d, Proceedings, page c.

at least 12,000 Rupees more, a sum altogether beyond our means, or our reasonable prospects.

The Zoological Curator Mr. Blyth, is engaged in the MS. of the descriptive drawings completed, and the Committee propose to issue the whole in a Portfolio to the members of the Society, as soon as Mr. Blyth enables them to do so.

Regarding Dr. Cantor's very beautiful drawings, the Secretaries have failed to obtain some essential information, and which they cannot hope for, before Mr. Torrens' expected visit to Calcutta in the ensuing month. The Committee of Papers confidently expect that in connexion with the Journal nearly the whole of Dr. Cantor's drawings will be published by the Society within a moderate period.

Alterations in Society's rules.

The Committee next invite the consideration of the Society to a proposal they regard as one of very great consequence. It has lately happened on several occasions that at scanty meetings, measures have been adopted and officers elected without any previous notice or opportunity for deliberation,—or for the expression of the general opinion of the members on the several proposals. The danger to which this exposes the society, is equally serious and obvious. They may at any time find a few members voting away funds or altering their organization so as to favor some particular pursuit. To prevent this the Committee suggest that in future all proposals affecting expenditure, election of officers, changes of organization, and generally all questions of importance, be first duly notified at a general meeting, then referred to the Committee of Papers for report, and not decided on finally, until passed by a general meeting, (after such report shall have been submitted,) at which at least 12 members must be present.

Institution of Sections.

The Committee are further desirous to advert to the strong necessity which appears to exist for forming special Committees or Sections among the members resident in Calcutta and its vicinity, for advice and reference to on subjects demanding peculiar acquirements in the individuals who are consulted.

It may be said that the Committee of Papers are so constituted or so

intended as to represent the different objects of the Society, but experience has proved beyond doubt that it never has so answered. The Committee has been at one time almost exclusively composed of gentlemen who deemed Oriental Literature the paramount object of the Society, and at another period we have seen researches in Oriental philology nearly abandoned in favour of Zoology and kindred sciences.

By the appointment of Sub-Committees or Sections, subject to annual election, for advice and reference, to which their functions should be strictly limited, and to be referred to only through the Committee of Papers, as Council of the Society,—we would have the means of combining in one group men of similar attainments, to whom the Society, through the Committee of Papers, could refer their doubts and difficulties for consideration and advice, and who would, from time to time, themselves suggest the objects to which the patronage of the Society might be profitably applied.

How efficiently this plan works in the French Institute, in the British Association, and in the Royal Society of London, the Committee need not press on consideration. They are persuaded it will prove highly beneficial if adopted by the Asiatic Society. It has already been partially acted upon at the November meeting, by the appointment of the following gentlemen as an Oriental Sub-Committee. *Members.*—The Rev. Dr. Hæberlin, the Rev. Mr. Long, Major Marshall, and Dr. Roer.

It is now proposed to extend the plan by forming for the following year similar Sub-Committees.

1. Geology and Mineralogy.
2. Zoology and Natural History.
3. Meteorology and Physics.
4. Geography and Indian Statistics.

It is recommended that the Secretaries of the Society be the Secretaries of the sections also. The Sub-Committees should be ex-officio Inspectors of the Museums in their several departments, and it should be strongly urged upon the section of Meteorology to take measures for securing for the Society a monthly Meteorological Report of Barometer, Sympiesometer, Thermometer, Hygrometer, also Rain Gauge, Anemometer, and a Register of thunder storms on the plan prescribed by Arago (v. *Annuaire*, Art. "*Tonnerre*,") such as those which in the

time of the lamented James Prinsep adorned each issue of the Journal, and provided data for Meteorologists all over India, wherewith to compare and correct their individual researches.

The Committee have only further to express their earnest hope that the members of a Society, the oldest in India, and holding a distinguished place in the estimation of the scientific world, will individually as well as in co-operation with each other, make their best efforts to promote the objects for which the Society has been instituted. In every department for research we number members of eminent acquirements. Those residing at distant stations will find in the sections now proposed representatives of their special pursuits with whom to correspond, with whom to compare, or mature the results of their enquiries. The Committee trust that new and efficient labourers will thus be soon induced to join our ranks thereby increasing our funds to such an amount as may enable us with the generous aid at present afforded by Government, to extend efficient patronage to every branch of research, which it is the province of the Asiatic Society to promote.

In submitting the preceding Report the Secretaries desire in justice to their eminent predecessor to republish here the resolution of the Society passed at the meeting of November, 1846, respecting the previous management of the accounts and expenditure.

Extract from Proceedings of Nov. 1846.

A letter having been read from Mr. Torrens to the Co-Secretary regarding the accounts and expenditure of the Society during his secretariat—

It was resolved unanimously and directed to be laid before the next general meeting for record.

That the Committees beg leave to repeat prominently the previous declaration of the Finance Committee, that the confusion in the accounts of the Journal arose entirely from an accidental omission and error on the part of the accountant, and further that they consider that every act of Mr. Torrens, in the management of the Society's pecuniary affairs has been done most openly and with their full cognizance and sanction.

(Adopted by the November Meeting.)

The following Accounts, and documents are appended for the information of the Society :—

1.—Mr. Bolst's abstract annual accounts, from January, 1842, to July, 1846.

2.—General sketch of account from 1842 to Dec. 1846, compiled by Mr. Muller, from Mr. Bolst's statements.

3.—Detailed account of expenditure on Oriental publications for the same period.

4.—Statement of the amounts received by the sale of Oriental publications.

5.—Statement of the Society's income.

6.—List of Members, and Office-bearers for 1847.

Asiatic Society of Bengal, January, 1847.

SUPPLEMENT TO REPORT.

*At a Meeting of the Asiatic Society, held on Wednesday evening, the
10th FEBRUARY, 1847.*

The Hon'ble Sir J. P. GRANT, in the Chair.

The Report submitted to the January meeting was taken into consideration.

Major Marshall objected to the mode in which the vacancies in the Committee of Papers had been filled up at the last meeting, and thought a *bond fide* annual election should take place, which he proposed should now be resorted to.

After some discussion it was proposed by the Lord Bishop of Calcutta, seconded by Mr. Ward, and carried with but one dissentient voice, that a formal election of all office-bearers should be resorted to *in future*, leaving the present arrangement undisturbed.

With reference to the paragraph in the Report which relates to the Rev. Dr. Hæberlin's edition of the *Smritis*, the senior Secretary read the following letter from Dr. Hæberlin, dated the 30th January, 1847.

MY DEAR SIR,—With reference to my proposal to print an entire collection of the *Smritis*, as submitted to the meeting of the Asiatic Society on the 1st of July last, I have the pleasure to inform you, that soon after that date, I addressed a letter to Mr. H. Torrens, then Secretary to the Society, stating, at his request, the probable expense of the undertaking, and requesting to know as soon as possible whether the Committee of Papers had sanctioned the arrangement, and when I might commence upon the work.

In reply Mr. Torrens stated, that I could commence the work whenever I pleased. I send for your perusal his letter to me. A considerable portion of the work has in consequence of this intimation of the then Secretary, been already printed. A specimen of the same I beg herewith to forward to you.

As it now appears that the Asiatic Society is scarcely in a position to carry on this important work, I am ready to take the entire responsibility upon myself if the Society will *subscribe* for 100 Copies. The work will be issued in two octavo volumes, and the price per volume will not exceed 10 Rupees.

I should be sorry, if from any circumstance, the publication of this interesting work should be retarded. Hitherto no attempt has been made to collect these scattered writings. A *few* of these *Smritis* only were some years ago printed in Bengálí characters, and in the form of the usual Native Puthis; but these are not generally known, nor are they at all fitted for common use. I am, therefore willing, with the assistance of the Society, to bear a considerable risk myself, rather than postpone the publication of the work to any future period. Kindly let me know, as soon as possible, whether this proposal meet with the approbation of the Society.

Believe me, yours sincerely,

J. HÆBERLIN.

The Senior Secretary stated on the part of the Committee of Papers, that they recommend to the Society the adoption of the Rev. Dr. Hæberlin's proposal, and a subscription to the *Smritis* for 100 copies, to be paid from the "Oriental Grant." *Agreed unanimously.*

Captain Broome proposed the addition of a section to represent *Numismatics* and *Architectural Antiquities*; this was seconded by Lieutenant-Colonel Forbes, and unanimously agreed to.

The Senior Secretary, on the part of the Committee of Papers, read the subjoined list of members proposed for the several Sections.

SECTION 1.—*Oriental Literature and Philology*.*

The Rev. Dr. Hæberlin.	G. A. Bushby, Esq.
Rev. J. Long.	Major Marshall.
Baboo Debendronath Tagore.	Welby Jackson, Esq.
Baboo Hurreemohun Sen.	

Secretary—Dr. Roer.

SECTION 2.—*Natural History*.

J. W. Grant, Esq.	Captain Munro.
R. W. G. Frith, Esq.	

Secretary—J. W. Laidlay, Esq.

SECTION 3.—*Geology and Mineralogy*.

D. H. Williams, Esq.	Dr. Js. Dodd.
Captain A. Broome.	

Secretary—J. W. Laidlay, Esq.

SECTION 4.—*Meteorology and Physics*.

Lieutenant-Colonel Forbes.	Rev. Mr. Pratt.
J. W. Grant, Esq.	

Secretary—Dr. W. B. O'Shaughnessy.

SECTION 5.—*Geography and Indian Statistics*.

G. A. Bushby, Esq.	S. G. T. Heatley, Esq.
Dr. Duncan Stewart.	Baboo Hurreemohun Sen.

Secretary—S. G. T. Heatley, Esq.

The foregoing list having been approved of, Captain Broome expressed his desire to leave the nomination of the Section of *Numismatics* and *Architectural Antiquities* to the consideration of the Committee of Papers.

Some typographical amendments having been suggested and agreed to, and various remarks made, leading however to no distinct resolution, the Report, with the additions above noted, was *unanimously adopted*.

W. B. O'SHAUGHNESSY,
Senior Secretary.

Asiatic Society, 11th February, 1847.

* Captain Latter having left Calcutta, is not included in this list.—*Secs.*

*Statement of Disbursements on Account of Oriental Publications,
from 1842 to 1846.*

July 30th, 1842. Paid Maulavi Abdullah			
for 90 copies of Fatawe Alamgiri, @			
10 Rs. per vol.	900	0	0
Stitching ditto @ 4 annas ditto,..	22	8	0
	<hr/>		
	922	8	0
Dec. 19th, paid Maulavi Abdullah for 90			
copies of ditto, vol. II.	900	0	0
Stitching ditto ditto,	22	8	0
	<hr/>		
	922	8	0
Ditto ditto paid Rev. J. Thomas for printing Index to			
the Mahábharata,	2,012	7	9
Jan. 3d, paid Pandit for correcting the proof sheet of			
Mahábharata,	16	0	0
March 8th, paid Yusúf Ali for copying De-			
wán Sherif in Persian,	19	0	0
Ditto "Share Gulestán," 6 sections,	2	0	0
	<hr/>		
	21	0	0
April 2d, paid Munshí for copying Jawahar ul Qurán			
in Persian, 19 sections, of 8 leaves to a section @ 3			
sections per Rupee,	6	5	3
Nov. 8th, paid Assistant Maulavi's salary for Sept. and			
Oct. 1842,	18	5	3
Dec. 12th, paid ditto ditto ditto for Nov. 1842,			
	10	0	0
Jan. 13th, 1843. Paid Shafátullah for copying Tawá-			
rikkh i Nádiri, per bill for Dec. 1842,	10	0	0
Sept. 21st, paid Maulavi Abdullah for print-			
ing 90 copies of Fatawe Alamgiri, vol.			
III. @ 10 Rs. per vol.	900	0	0
Stitching ditto @ 4 annas per ditto,	22	8	0
	<hr/>		
	922	8	0
	Paid in part,		
	600	0	0
Oct. 20th, paid ditto ditto, in full,	322	8	0
April 5th, paid Shafátullah, Assistant Maulavi, for co-			
pying and correcting Persian works for March, 1843,	10	0	0
May 5th, paid Munshí Shafátullah for co-			
pying Persian books,	9	0	0
Paper for the same,	1	0	0
	<hr/>		
	10	0	0
Nov. paid Munshí for copying 45 juz of Tafsir Ali Ibn			
Hasan Zauwári for the month of Oct. 1843,	30	0	0
Jan. 9th, 1844. Paid Helál Uddin for copying a Persian			
book,	6	0	0
March 8th, paid Hájí Farhat Husáin for copying an Ara-			
bie work, Kholásatul Ophá, being 52 juz @ 2½ per			
Rupee,	20	12	0

March 8th, paid Helál Uddín for copying a Persian book,	9	0	0
June 5th, paid ditto for copying a Persian book, ..	3	0	0
Ditto, paid ditto for copying a Plan of the Town of Amrawatti and a Sketch of Deepauldenna Amrawatti, ..	12	0	0
Jan. 9th, 1845. Paid for 1 ream printing paper for Istalahát Súfia, ..	20	0	0
Jan. 9th, paid Háfiz Ahmad Kabír for printing 500 copies of Istalahát Súfia, ..	210	0	0
March 5th, paid Munshí Helál Uddín for copying 32 pages of Kitáb Umda Darfaue Jaráhiát, @ 9 pages per Rupee, ..	3	8	9
August 8th, paid Nacoo Painter for painting a Map of Assam, &c. per Bill, ..	44	6	6
Ditto, paid Helál Uddín for copying an Arabic work "Kitáb Umda," ..	9	8	0
Sept. 5th, paid H. M. Smith for printing 750 copies coloured of the Nurbudda River, ..	136	4	0
Nov. 6th, paid for copying Tawárikh Dost Muhammad, with paper, ..	1	12	0
Dec. 30th, paid Maulavi Amánatullah for a printed copy of Burhán Qáte, compiled by Ibn Khalafut Tabrezí Muhammad Husain, ..	18	0	0
Ditto, paid extra Munshí for copying the following works : —a copy of Pusto Dictionary, by Najibullah Khán, a Gulestán in the same language, by Mír Muhammad Peshawarí, and a poetical Urdu translation of Shaikh Faríduddín's letters, Pandanámah made by Maqnuddin Tabrezí, ..	35	0	0
March 6th to April 21st, 1846. Paid Háfiz Ahmad Kabír for printing 500 copies of the Tawárikh i Nádiri (History of Nádír Shah) 386 pages @ 2-8 per page. .	965	0	0
July 14th, paid Persian writer for copying the Arabic book Naharul Fáeq Sharch Kanzud Daqáak for June last, ..	5	0	0
August, paid ditto for translating an Arabic work, ..	10	0	0
Sept. 11th, paid Maulavi Qurbán Alí for copying the Arabic work Naharul Fáeq Sharch Kanzud Daqáak for August. .	3	0	0
Nov. 21th, paid Manlavi Qurbán Alí for copying the Arabic work Nabarul Fáeq Sharch Kanzud Daqáak for Oct. 1846, ..	6	0	0
Dec. 4th, paid ditto ditto ditto for Nov. ..	4	0	0
Dec. 18th, paid Rev. A. W. Street, Bursar, Bishop's College, for press work and paper of 9 pp. 500 copies of Extra Title and Preface to Abdur Razáq's Dictionary of Technical terms, by Dr. Sprenger @ 3-4 per page, ..	29	4	0

Co.'s Rs. 6,463 1 6

Statement of Disbursements on Account Purchase of Oriental Publications from 1842 to 1846.

August 8th, 1842. Paid Thacker and Co., for 5 copies of Alif Lillah, vol. 4th,	60	0	0
June 25th, 1844. Paid Bhabánícharan Bânarjî for sundry books per bill,	81	3	0
August 9th, 1845. Paid ditto ditto ditto per ditto, ..	3	10	0
Nov. 18th, paid Maulavi Masîhuddin for books, ..	23	8	0
March 5th, paid Dr. Roer for Sprenger's Elements of Hindu Law, Vol. II. 8 Rs. ; Crawford's History of the Indian Archipelago, Vol. I. 5 Rs.	13	0	0
Oct. 4th, paid Dr. Roer for sundry books per vouchers, ..	84	8	0
Dec. 30th, paid Maulavi Badîruddin for a printed copy of Sarfe Urdu, by Maulavi Amánatullah, in Hindustání Poetry,	2	0	0
Feb. 4th, 1846. Paid James Francis Corcoran for 35 copies of the 1st part of the Urdu Translation of Æsop's Fables,	70	0	0
March, paid Bhabánícharan Bânarjî for sundry Bengálî books, per bill,	12	9	0
April 6th, paid ditto for a copy of Bhágabat Gítá, ..	2	8	0
June 12th, paid Rev. J. Thomas for 30 copies of Dr. Wise's Commentary on the Hindu System of Medicine, ..	300	0	0
Nov. 24th, paid Ostell and Lepage for a copy of Forbes' Hindu Manual,	4	12	0
	<hr/> Co.'s Rs. 657 10 0 <hr/>		



SECRETARY'S NOTE.—Of the account thus furnished the following items seem to be irregularly charged to the Oriental grant.

Mr. Smith's Bill for map of Nurbudda river,	Rs. 136	4	0
Crawford's history of Indian Archipelago,	5	0	0
	<hr/> Co.'s Rs. 141 4 0		

Statement of Contingent Charges on Account of Oriental Publications from 1842 to 1846.

Feb. 2d, 1842. Paid Daftari for binding Oriental books, Rs.	33	6	0
July 2d, paid Mackenzie, Lyall and Co., for advertizing Notice to the Purchasers of Mahābhārata, ..	2	10	0
August 16th, paid Bengal Hurkaru ditto, ..	1	0	0
Ditto, paid Englishman ditto, ..	1	0	0
Ditto, paid for Bengal Ink, ..	0	1	0
Nov. 8th, paid charges for dispatching Index to the Mahābhārata to the Hon'ble the Court of Directors and Monsieur Jules Mohl, ..	7	2	0
March 7th, 1843. Paid for a tin box for 13 volumes of Oriental works sent to the Pasha of Egypt, ..	2	0	6
Ditto, paid for 1 quire of Balasore paper, ..	1	0	0
May 5th, paid for binding books, ..	9	8	0
May 12th, paid Allan, Patton and Co., for Bills on London, on Messrs. Gladstone, Kerr and Co., in favor of J. Reynolds, Secretary Oriental Translation Fund, a subscription of the Society for 1842-43, £10 10s per annum, £21 @ 1-11 $\frac{5}{8}$ per Rupee,* ..	213	5	5
July 10th, paid for binding Oriental works, ..	21	6	0
August 5th, paid for 5 tin and 5 wooden boxes for the Oriental Publications, ..	15	0	0
Sept. 6th, paid for binding Oriental books, ..	17	1	0
Ditto, paid for Balasore paper, ..	1	0	0
Oct. 11th, paid for Balasore paper 1, Binding book 1, ..	2	0	0
Nov. 3d, paid for binding books, ..	3	12	0
Jan. 9th, 1844. Paid for Black and Red Ink for copying Nāgari work, ..	1	0	0
May 11th, paid for binding Oriental books, ..	43	4	0
April 5th, 1845. Paid for paper for copying Sanskrit,..	1	0	0
May 7th, paid S. Martin for binding Persian books, ..	120	0	0
July 4th, paid Daftari for binding books, ..	16	12	0
August 9th, paid ditto ditto, ..	12	0	0
March, 1846. Paid ditto for binding a book—Life of Rām-mohan Ray, ..	1	4	0
Ditto paid ditto sundry Oriental works, ..	10	4	0
Ditto paid ditto ditto ditto, ..	8	0	0
Sept. 11th, paid ditto for binding books, ..	17	4	0
Co.'s Rs.	561	15	11

* This item is irregularly charged to the Oriental grant.—Secs.

Oriental Publications, &c. sold from the 1st of January to the 31st of December, 1846.

Tibetan Dictionary, 1 copy,	Rs.	10	0	0
Mahábhārata, 18 vols.		200	0	0
Index to ditto, 32 vols.		50	0	0
Harivansa, 10 copies,		47	8	0
Naishada, 7 copies,		39	0	0
Rājatarangini, 3 copies.		15	0	0
Sūsruta, vols. I. and II. 4 copies each,		32	0	0
Sanskrita Catalogue, 3 copies,		3	0	0
Lassen's Gīta Govinda, 1 copy,		2	8	0
Fatawe Alangiri, vol. I. 2 copies, vol. II. 2 do. vol. III. 3 do., vol. IV. 5 do., vol. V. 6 do. vol. VI. 7 do.,		200	0	0
Jawane Ilm Riázi, 1 copy,		4	0	0
Khazanat ul Ilm, 4 copies,		32	0	0
Tawárikh i Nádiri, 5 copies,		40	0	0
Persian Catalogue, 3 copies,		3	0	0
Histoire des Rois du Kachmir, 1 copy.				
Travels of Ibn Batuta, 1 copy.		6	0	0
Essai sur le Pali, 1 copy,		3	0	0
Leech's Grammar and Vocabulary of the Beloochi and Punjabi Languages, 1 copy,		1	0	0
Edgeworth's Kashmīri Grammar, 1 copy,		1	0	0
Journal of the Asiatic Society of Bengal, 84 Nos. ; 6 at Rs. 2, and the rest at Rs. 1-8,		129	0	0
Asiatic Researches, vol. XIX. part II. 2 copies, vol. XX. . part I. 2 copies,		20	0	0
Total Co.'s Rs.		838	0	0

Abstract of the number of books received into the Library, during the year 1846.

	Works.	Vols. & Nos.
English,	81	389
French,	16	33
Latin,	6	39
German,	28	56
Norwegian,	16	51
Sanskrita,	8	52
Bengálí,	3	5
Arabic,	1	1
Persian,	1	1
Urdu,	2	36
Hinduí,	1	1
Total	164	668

Oriental Publications in store at the close of the year 1846.

Mahābhārata, vol. I. 177 copies, vol. II. 193 do., vol. III. 219 do., vol. IV. 245 do.

Index to Mahābhārata, vol. I. 297 copies, vol. II. 299 copies, vol. III. 305 do., vol. IV. 280 do.

	Copies.
Harivansa,	428
Rājatarangini,	257
Naishada,	156
Súsruta, vol. I. 235, vol. II. 281.	
Fatawe Alamgiri, vol. I. 68 copies, vol. II. 77 do., vol. III. 86 do., vol. IV. 39 do., vol. V. 77 do., vol. VI. 89 do.	
Enāṣṭā, vol. II. 21 copies, vol. III. 13 do., vol. IV. 15 do.	
Khazanat ul Ilm,	361
Jawame Ilm Riāzī,	371
Anis ul Musharrahin,	293
Sharāya ul Islām,	309
Tibetan Grammar,	211
Tibetan Dictionary,	191
Points in the History of the Greek and Indo-Scythian Kings,	15
Leech's Grammar and Vocabulary of the Beloochi and Punjabi Languages,	
Vocabulary of the Scinde Languages,	
Istalahāt Šūfiā,	377
Tawārikh i Nādiri,	472
Asiatic Researches, vol. I. 5 copies, vol. II. 2 do., vol. III. 3 do., vol. VI. 50 do., vol. VII. 111 do., vol. VIII. 43 do., vol. IX. 101 do., vol. X. 53 do., vol. XI. 96 do., vol. XII. 33 do., vol. XIII. 39 do. vol. XIV. 57 do. vol. XV. 52 do., vol. XVI. 84 do., vol. XVII. 205 do., vol. XVIII. 42 do., vol. XVIII. part 1st, 61 do., vol. XVIII. part 2nd, 155 do., vol. XIX. 222 do., vol. XIX. part 1st, 19 do., vol. XIX. part 2nd, 90 do., vol. XX. 217 do., vol. XX. part 1st, 11 do., vol. XX. part 2nd, 121 do., Index,	122
Sanskrita Catalogue,	230
Persian ditto	220
English ditto.	

Statement of the Amounts received by the Sale of Oriental Publications.

Sale of Oriental Publications in 1842,	829	8	0
Ditto Ditto 1843,	696	8	0
Ditto Ditto 1844,	424	4	9
Ditto Ditto 1845,	1,017	10	0
Ditto Ditto 1846,	777	7	3
<hr/>			
Co.'s Rs. 3,775 6 0			
<hr/>			
Average per year Co.'s Rs. 755 0 0			



Statement showing the monthly income of the Asiatic Society, from Members, Subscribers to the Journal, and sale of Publications.

136 *Members.*

83 Members paid for 3d Qr. of 1846 at 64 per Annum,	5,248
10 Ditto (new)	640
29 Ditto who have not paid,	1,920
<hr/>	
7,808	

14 Ditto who will probably not pay.

132

61 Subscribers to the Journal at 16 Rs. per Annum,	976
40 Copies for the Hon'ble Company.	640
<hr/>	
1,616	
<hr/>	
9,424	
Average receipts by sale of Publications,	755
<hr/>	
Co.'s Rs. 10,179	

Probable monthly income, Co.'s Rs. 848

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Asiatic Society.

DEPENDENCIES AT DEBIT.		DEPENDENCIES AT CREDIT.	
<i>Liabilities to meet in all 1847.</i>		Company's Paper,.....	Co.'s Rs. 3,800 0 0
Mr. Blyth's claim,.....	Co.'s Rs. 3,000 0 0	Cash,	2,230 0 6
Mr. Torren's claim,	1,500 0 0	Due from Agent in Paris say,	1,000 0 0
Mr. Muir's claim for 500 Rs. to be returned, not having been applied to Original purpose,.....	500 0 0	Realizable by Outstanding Subscriptions, estimated at 50 per cent. on the amount of uncollected bills, Rs. 5,104.	2,552 0 0
Due to Oriental fund since September, 1846.	2,000 0 0	Realizable by Outstand- } ing Subscriptions to } the Journal. }	Unknown, the late accountant not having furnished the accounts.
Estimated Cost of 4 Nos., of the Journal published for 1846, at the monthly average of 350 Rs. per No.	1,400 0 0		
		Co.'s Rs.	9,582 0 6
<i>Calcutta, Asiatic Society, } 31st December, 1846. }</i>		JOHN MULLER, <i>Accountant, Asiatic Society.</i>	

LIST OF SUBSCRIBING MEMBERS.

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Ardall, J. Esq.	Grant, Sir J. P.
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Baker, Capt. W. E.	Grant, W. P. Esq.
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Birch, Lieut.-Col. R. J. H.	Goodwyn, Major H.
Birch, Major F. W.	Grey, W. Esq.
Bogle, Major A.	Hardinge, C. S. Esq.
Brandreth, J. E. L. Esq.	Hodgson, B. H. Esq.
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Benson, W. H. Esq.	Heatly, S. G. T. Esq.
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Campbell, A. Esq.	Jenkins, Major F.
Colvin, J. R. Esq.	Jerdon, T. C. Esq.
Cameron, Hon'ble C. H.	Jackson, W. B. Esq.
Cautley, Capt. P. S.	Karr, W. Seton, Esq.
Colvin, B. J. Esq.	Kittoe, Capt. M.
Christopher, A. Esq.	Knighton, W. Esq.
Connoyloll Tagore, Baboo.	Latter, Lieut. T.
Colville, J. Esq.	Lushington, E. H. Esq.
Dunlop, A. C. Esq.	Lushington, G. T. Esq.
Durand, Capt. H. M.	Loch, G. Esq.
Davidson, T. R. Esq.	Laidley, J. W. Esq.
Dodd, J. Esq.	Lawrence, Major H. M.
Elliott, W. Esq.	MeLeod, Major W. C.
Earle, W. Esq.	Mill, J. B. Esq.
Furlong, J. Esq.	Middleton, J. Esq.
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Marshall, Major G. T.	Spilsbury, G. G. Esq.
McQueen, Rev. J.	Strachey, Lieut. R.
McKilligan, J. P. Esq.	Sleeman, Lieut.-Col. W. H.
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McLeod, D. F. Esq.	Stewart, Dr. D.
McKenzie, J. Esq.	Strong, F. P. Esq.
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Montague, —Esq.	Stacy, Lieut.-Col. L. R.
Ouseley, Lieut.-Col. J. R.	Sutchurn Ghosal, Rajah.
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Onmanney, M. C. Esq.	Samuells, E. A. Esq.
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Pratt, Rev. Mr.	Trevor, C. B. Esq.
Phayre, Capt. A.	Thomason, Honourable J.
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Prinsep, C. R. Esq.	Theobald, W. Esq.
Prosonocoomar Tagore, Baboo.	Torrens, H. Esq.
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Rawlinson, Major C. H.	Wilson, the Rt. Rev. Dr.
Ravenshaw, E. C. Esq.	Withers, Rev. G. U.
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Romanath Tagore, Baboo.	Wattenbach, A. Esq.
Rajah Radhakant Deb, Bahadoor.	Ward, J. Esq.
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Rustumjee Cowasjee, Esq.	Wilby, G. R. Esq.
Smith, Lieut. R. Baird.	Young, Dr.

MEMBERS ELECTED AT THE JANUARY MEETING 1847.

Diram, N. M. Esq.	Muller, J. Esq.
Debendernath Tagore, Baboo.	Munro, Capt. W.
Hurreemohun Sen, Baboo.	Ouseley, Capt.
Jones, R. Esq.	

ASSOCIATE MEMBERS.*

Dr. E. Roer.	Dr. McGowan, (China.)
Rev. J. Long.	H. Piddington, Esq.
E. Blyth, Esq.	

* This class of ordinary members consists of gentlemen who are exempted from the payment of subscriptions.—There is also an *Honorary class* chiefly of highly distinguished non-residents and foreigners, a list of whom will be subsequently published.—*Secs.*

LIST OF OFFICE-BEARERS

FOR 1847.

President.

THE RIGHT HONORABLE LORD HARDINGE, G. C. B.
GOVERNOR GENERAL OF INDIA.

Vice-Presidents.

THE LORD BISHOP OF CALCUTTA.
THE HON'BLE SIR J. P. GRANT.
THE HON'BLE SIR H. SETON.
LIEUT.-COL. FORBES.

Honorary Vice-President.

H. TORRENS, Esq.

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G. A. BUSHBY, Esq.	R. W. G. FRITH, Esq.
W. P. GRANT, Esq.	J. W. COLVILL, Esq.
WELBY JACKSON, Esq.	AND
CAPT. BROOME, H. A.	S. G. T. HEATLEY, Esq.,

Secretaries.

DR. W. B. O'SHAUGHNESSY.
J. W. LAIDLAY, Esq.
DR. E. ROER, *Co-Secretary, Oriental Department.*

BABU RAJENDRA LÁL MITTRA, *Librarian, &c.*
H. PIDDINGTON, Esq. *Curator Museum of Geology, &c.*
E. BLYTH, Esq. *Ditto ditto Zoology, &c.*

Abstract Statement of Account of the Asiatic Society for the year 1842.

DISBURSEMENTS.			
MUSEUM.			
To paid Mr. Blyth's Salary as Curator @ 250 per month, ..	3,000	0	0
.. Establishment of Taxidermists, Artists, Carpenters, &c. ..	1,591	3	3
.. Contingencies for Museum, ..	827	12	6
.. Mr. Gomes' Travelling Taxidermist, through Lieut Tickell and Mr. Blyth, ..	169	0	0
.. Rewards to Messrs. Bouchez and Nicholas for Extra work in the museum, ..	20	0	0
.. Mr. Holquett for proceeding to Darjeeling ..	195	0	0
.. 2 Insect cases, ..	118	0	0
	5,920	15	9
LIBRARY.			
To paid Dr. E. Roer's Salary as Librarian @ 100 per month, ..	1,200	0	0
.. Establishment for Oriental works, @ 78 per month, ..	936	0	0
.. Establishment and Contingencies, ..	1,284	13	0
.. Books purchased from Messrs. Thacker and Co., Ostell and Lepage, and P. S. D'Rosario and Co. ..	207	11	0
.. Coins purchased from Mr. Mytton, ..	36	0	0
.. Freight and Insurance on Books sent to London, ..	169	2	3
	3,833	10	3
MISCELLANEOUS.			
To paid Messrs. Lyall, Matheson and Co. of a refund of Mr. G. G. McPherson's subscription consequent on his absence from India, ..	144	0	0
.. Messrs. Mandy and Co. for Varnishing an oil painting (Landscape), ..	50	0	0
	194	0	0
MUSEUM ECONOMIC GEOLOGY.			
To paid Mr. Puddington's Salary as Joint Curator (from 26th February), ..	2,276	12	6
.. Establishment and Contingencies, ..	652	13	6
.. Mr. J. B. Plumb for Apparatus purchased of him, ..	50	0	0
.. Mr. De Garner for a pair of Scales, ..	70	0	0
	3,049	10	0
MUSEUM MINERALOGY AND GEOLOGY.			
To paid Contingencies, ..	143	2	3
.. One Mineral case, ..	40	0	0
.. Minerals purchased from Mr. Mornay, ..	120	0	0
	303	2	3
SECRETARY'S OFFICE ESTABLISHMENT.			
To paid Establishment and Contingencies, ..	1,424	9	6
JOURNAL.			
To paid the Secretary (Mr. H. Torrens) for Journals supplied by him to Members, ..	2,563	8	0
.. For Copying, Drawing, &c., ..	58	8	0
	2,622	0	0
ORIENTAL PUBLICATIONS.			
To paid J. Bennett for Sir A. Burnes' Drawings, ..	650	0	0
.. Messrs. Ballin and Co. for ditto ditto, ..	2,145	2	0
.. W. Rnshton and Co. for paper for ditto, ..	643	0	9
.. Moulavee Abdoolah for 2 volumes of the Futura Ahungiri, ..	1,845	0	0
.. Rev. J. Thomas for Printing Index to the Mahabharata ..	2,012	7	9
	7,295	10	6
BUILDINGS.			
To paid in part for additions and repairs to the Society's Premises, ..	3,000	0	0
	27,643	10	3
By balance in favor of the Secretary, ..	1,629	4	1
	Co.'s Rs.	29,272	14 4

Calcutta, 31st December, 1842.

ASSETS.			
MUSEUM.			
By allowance authorized by the Hon'ble the Court of Directors for the services of a Curator @ 250 per month, ..	3,000	0	0
.. Ditto for preparation of Specimens @ 50 per month. ..	600	0	0
	3,600	0	0
LIBRARY.			
By allowance on account of Establishment for the custody of Oriental books transferred from the College of Fort William @ 78 per month, ..	936	0	0
By Sale proceeds of Books, ..	829	8	0
By refund on account of attendance of Assistant Librarian, ..	20	0	0
	1,785	8	0
MISCELLANEOUS.			
By Subscriptions from Members for a Portrait of Sir E. Blyan, ..	908	0	0
By Cash of a Interest received from Government Agents on Government Securities in their custody, ..	300	0	0
By Sale proceeds of the following Government Paper, one 5 per cent. paper No. 4852 of 3209 dated 14th July, 1827, for ..	Sa. Rs.	5,000	0 0
Interest thereon from 14th July to 19th Dec. 1842, ..	108	5	4
	5,108	5	4
Less Discount @ 1 r. 2 a. per cent. ..	57	7	7
	Sa. Rs.	5,050	13 9
	Co.'s Rs.	5,387	9 0
By Cash of a 6th Dividend from Assignee to the Estate of McIntosh and Co. ..	127	9	9
	6,723	2	9
PUBLICATION OF ORIENTAL WORKS.			
By grant from Government @ 500 per month, ..	6,000	0	0
MUSEUM ECONOMIC GEOLOGY.			
By allowance from Government for the services of a Joint Curator from 26th Feb. @ 250 per month, ..	2,276	12	6
CONTRIBUTIONS AND ADMISSION FEES.			
By receipts from members, ..	7,038	0	0
By balance as per a/c rendered on the 31st Dec. 1841. ..	1,819	7	1
	Co.'s Rs.	29,272	14 4

E. E.

Abstract Statement of Account of the Asiatic Society for the year 1843.

DISBURSEMENTS.

MUSEUM.			
To paid Mr. Blyth's Salary as Curator @ 250 per month, ..	3,000	0	0
.. Establishment of Taxidermists, Artists, Carpenters, &c., ..	1,288	7	5
.. W. Ridsdale for printing Osteological Catalogue and remarks on the Zoology of the Tenasserim Provinces, ..	128	8	0
.. Contingencies for Museum, ..	1,544	8	0
.. Value of glass eyes received from Mr. Bartlett of London through Mr. Blyth, £15. 18s. ex. @ 1s. 11½d. per R. ..	161	8	4
.. Signor Apparuti for Birds, ..	150	0	0
.. Balance of salary and Contingencies for Mr. Holquet's deputation to Darjeeling, ..	172	14	9
.. Glass cases, ..	611	10	0
	7,057	8	6
LIBRARY.			
To paid Dr. Roer's salary as Librarian @ 100 per month, ..	1,200	0	0
.. Establishment for Oriental works, ..	926	0	0
.. Contingencies and Establishment, ..	1,444	7	4
.. Freight and Insurance on books sent to England, ..	120	8	0
.. Books purchased from Mr. Frith, Messrs. Thacker & Co. and Ostell and Lepage, ..	534	12	0
.. Coins purchased from Lieut. A. Cunningham, of Engineers, ..	179	0	0
.. W. Ridsdale for printing Catalogues, ..	562	12	0
.. Marble slab with gold letters, ..	80	13	3
	5,048	4	7
MISCELLANEOUS.			
To Remitted through Messrs. W. H. Allen and Co., to Mr. Reynolds Society's subscription on account of Oriental Translation Fund £21 ex. @ 1s. 11½d. per R., ..	213	5	5
To paid Mr. Piddington's salary as sub-Secretary @ 200 per month, ..	1,600	0	0
	1,813	5	5
MUSEUM ECONOMIC GEOLOGY.			
To paid Mr. Piddington's salary as Joint Curator @ 250 per month, ..	3,000	0	0
.. Establishment and Contingencies, ..	939	5	1
.. W. Ridsdale for printing Circulars, &c., ..	56	8	0
	3,995	13	1
MUSEUM MINERALOGY AND GEOLOGY.			
To Contingencies, ..	250	13	0
SECRETARY'S OFFICE ESTABLISHMENT			
To paid Establishment and Contingencies, ..	1,445	1	9
JOURNAL ASIATIC SOCIETY.			
.. Secretary (Mr. Torrens) for Copies supplied to members, ..	1,459	8	0
.. Paid for plates, charts, drawings, &c., ..	1,449	13	5
	2,909	5	5
ORIENTAL PUBLICATIONS, &c.			
To paid for 30 Copies 3d Vol. Futwa Alimgiri, ..	922	8	0
.. Mr. Bennett for Sir A. Burnes' drawings, ..	200	0	0
.. Drawing Paper for Do. ..	225	8	9
	1,348	0	9
ASIATIC SOCIETY OF PARIS.			
To paid for copying the Vedas, ..	150	0	0
To paid for balance of Account Current due the Society per Proceedings of June, 1843, ..	233	7	9
	383	7	9
BUILDINGS.			
To paid in full for Repairs and Additions to the Society's Premises, ..	4,571	7	0
	4,571	7	0

Co.'s Rs. 28,823 3 3

ASSETS.

MUSEUM.			
By allowance authorized by the Hon'ble the Court of Directors for the services of a Curator @ 250, ..	3,000	0	0
Ditto for preparation of specimens @ 50, ..	600	0	0
	3,600	0	0
LIBRARY.			
By allowance of Establishment for the Custody of Oriental books transferred from the College of Fort William @ 78 per month, ..	936	0	0
By Sale proceeds of books, ..	696	8	0
	1,632	8	0
MISCELLANEOUS.			
By refund of Import duty on Professor Mill's bust, ..	76	10	3
MUSEUM ECONOMIC GEOLOGY.			
By allowance from Government for the services of a Joint Curator @ 250 per month, ..	3,000	0	0
Ditto for Establishment and Contingencies, ..	1,424	7	3
	4,424	7	3
PUBLICATION OF ORIENTAL WORKS.			
By grant from Government @ 500 per month, ..	6,000	0	0
CONTRIBUTIONS AND ADMISSION FEES.			
By receipts from members, ..	7,604	0	0
PICTURE OF H. T. PRINSEP, Esq			
By subscriptions from Members for a portrait of, ..	1,195	0	0
ASIATIC SOCIETY OF PARIS.			
By Cash received for copying the Vedas, ..	625	0	0
By balance in favor of the Society as per account Current rendered on the 31st Dec. 1842. ..	1,629	4	1
	26,786	13	7
By balance due from the Society, ..	2,036	5	8

Co.'s Rs. 28,823 3 3

B. E

Abstract Statement of Account of the Asiatic Society for the year 1844.

DISBURSEMENTS.			
MUSEUM.			
To paid Mr. Blyth's salary as Curator @ 250 per month..	3,000	0	0
„ Establishment of Taxidermists, Artists, Carpenters, &c.,	1,418	11	0
„ Contingencies for Museum,	1,437	6	9
„ 2 Insect Cases @ 65,	130	0	0
„ Messrs. Currie and Co., for 1 Teak wood stand,	38	4	0
	6,024	5	9
LIBRARY.			
To paid Dr. Roer's salary as Librarian @ 100 per month,	1,200	0	0
„ Assistant Librarians,	493	5	4
„ Establishment for Oriental works @ 68 per month,	816	0	0
„ Establishment and contingencies for library,	1,350	14	10
„ Freight on books sent to London, &c.	23	4	0
„ Books purchased from Messrs. Thacker and Co., and Ostell and Lepage,	341	9	0
	4,225	1	2
MISCELLANEOUS.			
To paid Messrs. Lattey, Brothers and Co., in part of a silver inkstand,	932	0	0
„ Mr. Piddington as sub-secretary @ 200,	2,400	0	0
„ Mr. Martin for a monument over the remains of the late Mr. Csoma de Koros, per order of A. Campbell, Esq., of Darjeeling,	150	0	0
„ Bagshaw and Co., refund of Captain Hutton's contributions, less subscription to the Journal,	30	0	0
„ Freight on a case from Singapore,	2	0	0
„ J. Wenner for marble frames for busts, &c.	111	2	0
	3,625	2	0
MUSEUM ECONOMIC GEOLOGY.			
To paid Mr. Piddington's salary as Joint-Curator @ 250,	3,000	0	0
„ Establishment,	352	0	0
„ Lattey, Brothers and Co. for a silver cup with cover,	39	0	0
„ Messrs. Ostell and Lepage for sundries,	57	12	0
„ Messrs. Noskey and Co., for ditto,	21	9	6
„ Messrs. Thomson and Co., for ditto,	80	0	0
„ Mr. Heatly,	33	0	0
„ Contingencies,	495	12	7
	4,079	2	1
MUSEUM MINERALOGY AND GEOLOGY.			
To paid Mr. J. Doid for a Collection of rocks purchased of him,	97	0	0
„ Contingencies for 12 months,	113	0	9
	210	0	9
SECRETARY'S OFFICE ESTABLISHMENT.			
To paid Establishment and Contingencies,	1,298	10	9
JOURNAL ASIATIC SOCIETY.			
To paid for proceeds of Journals sold by Messrs. Allen and Co., of London, and transferred to Society's Account Current, £42 16 3,	451	7	5
„ For plates, charts, prints, drawings, &c.	418	3	3
„ W. Ridschle (on account) for printing Journals,	236	4	0
„ Ditto ditto ditto,	360	0	0
	1,465	14	8
ORIENTAL PUBLICATIONS.			
To paid Mr. J. Bennett balance on account of Sir A. Burnes' drawings,	18	0	0
„ Ditto for Cantor's Chusan Zoology,	900	0	0
	918	0	0
Carried over,	21,848	5	2

ASSETS.			
MUSEUM.			
By allowance authorized by the Hon'ble the Court of Directors for the services of a Curator for 12 months @ 250 per month,	3,000	0	0
Ditto for preparation of specimens @ 50 per month,	600	0	0
	3,600	0	0
LIBRARY.			
By allowance on account of Establishment for the custody of Oriental Books transferred from the College of Fort William @ 78 per month,	936	0	0
By sale proceeds of books,	1,002	11	3
	1,938	11	3
MISCELLANEOUS.			
By subscriptions from members for an inkstand presented to the Secretary (Mr. H. Tarrens),	932	0	0
By Cash on account interest received from Government Agents on Government Securities in their custody,	1,037	5	7
	1,969	5	7
PUBLICATION OF ORIENTAL WORKS.			
By grant from Government @ 500 per month,	6,000	0	0
MUSEUM ECONOMIC GEOLOGY.			
By allowance from Government for the services of a Joint-Curator @ 250 per month,	3,000	0	0
By allowance for Establishment and Contingencies @ 64 per month,	768	0	0
	3,768	0	0
CONTRIBUTIONS AND ADMISSION FEES.			
By receipts from members,	6,950	0	0

Carried over, 24,226 0 10

Abstract Statement of Account of the Asiatic Society for the year 1844.

				Brought over, 21,848 5 2				By balance due from the Society.				Brought over, 24,226 0 10			
ASIATIC SOCIETY OF PARIS.															
To paid for copying the Vedus.				50 0 0								893 7 8			
PICTURES OF SIR E. RYAN AND H. T. PRINSEP, Esq.															
To paid Messrs. Carr, Tagore and Co., per draft of Sir E. Ryan and Messrs. H. T. and W. Prinsep @ 10d. S.				1,142 13 8											
BUILDINGS.															
To paid Mr. Moriny for stopping leaks and sundry petty repairs,				44 0 0											
				23,083 2 10											
To balance due from the Society as per Account Current furnished on the 31st Dec. 1843.				2,036 5 8											
				Co.'s Rs. 25,119 8 6								Co.'s Rs. 25,119 8 6			

Calcutta, 31st December, 1844.

E. E.

Abstract Statement of Account of the Asiatic Society for the year 1845.

DISBURSEMENTS.

MUSEUM.			
To Mr. Blyth's salary as Curator at 250 per month...	3,000	0	0
" Establishment of Taxidermists, Artists, Carpenters, &c...	1,666	1	6
" Contingencies...	901	8	9
" Glass Cases...	475	0	0
" Charges for a Taxidermist sent to Arracan...	30	0	0
	6,072	13	3
LIBRARY.			
To Dr. E. Roer's salary as Librarian at 100 per mensem...	1,200	0	0
" Assistant Librarian ditto...	446	16	6
" Establishment for Oriental works...	806	0	0
" Establishment and Contingencies...	1,312	1	6
" Books purchased from Messrs. Thacker and Co. Ostell and Leppage and P. S. D'Rozario and Co. &c.	1,031	11	0
" J. S. Morton for binding...	120	0	0
	4,916	10	0
MUSEUM ECONOMIC GEOLOGY.			
To Mr. Piddington's salary as Joint-Curator at 250 per mensem...	3,000	0	0
" Establishment...	371	0	0
" Contingencies...	248	2	3
	3,619	2	3
MINERALOGICAL AND GEOLOGICAL MUSEUM.			
To Contingencies for...	36	3	6
ORIENTAL PUBLICATIONS.			
To J. Bennett on account Dr. Cantor's Zoology...	800	0	0
" Mrs. Bullin for printing...	261	6	0
" Batta balance of account for printing Sir A. Burnes' Drawings...	68	4	0
" Hafiz Ahmed Kubeer for printing Ishlahati...	230	0	0
	1,359	10	0
MISCELLANEOUS.			
To Mr. Piddington's salary as sub-secretary at 200 per month...	2,400	0	0
" Messrs. P. S. D'Rozario and Co. for printing receipts...	29	0	0
" Postage on return parcels and copying a circular...	20	4	0
" Freight on books and parcels...	89	14	3
" Policy of Insurance on books per Lallah Rookh...	22	8	0
" Messrs. Culvin, Ainslie Gowie, and Co., for transit charges of 5 boxes of Fossils presented by Captain W. E. Baker...	80	8	0
" Messrs. Shearwood and Co., for a Mahogany stand...	88	8	0
" Mr. J. Weaver for a Marble slab with Gold letters to the memory of the late Mr. Csoma de Kuros...	175	4	0
" Mr. J. Clumme for winding and keeping the Clock in order...	25	0	0
" Messrs. Lutley, Brothers and Co., for a silver case for Gold Medal...	20	0	0
" Mr. J. Bennett for a Maple wood picture frame...	40	0	0
	2,990	11	3
Carried over,	19,195	5	3

ASSETS.

MUSEUM.			
By allowance authorized by the Hon'ble the Court of Directors for the services of a Curator for 12 months at 250 per mensem...	3,000	0	0
By allowance for preparation of specimens for 12 months at 50 per mensem...	600	0	0
By advance to J. P. Gomes by Captain Phayre...	20	0	0
	3,620	0	0
LIBRARY.			
By allowance on account Establishment for the custody of Oriental works transferred from the College of Fort William for 12 months at 78 per mensem...	936	0	0
By Sale proceeds of Books...	1,069	14	0
	2,005	14	0
MUSEUM ECONOMIC GEOLOGY.			
By allowance from Government for the services of a Joint-Curator for 12 months at 250 per month...	3,000	0	0
By allowance for Establishment and Contingencies at 61 per month...	768	0	0
	3,768	0	0
PUBLICATION OF ORIENTAL WORKS.			
By grant from Government for 12 months at 500 per month...	6,000	0	0
CONTRIBUTIONS AND ADMISSION FEES.			
By receipt from members during the year...	7,141	0	0
MISCELLANEOUS.			
By Cash on account Interest received from Government Agents on Government Securities in their Custody...	701	11	5

Carried over, 23,242 12 5

Abstract Statement of Account of the Asiatic Society for the year 1845.

		Brought over.			19,195	5	3					Brought over.			23,212	12	5		
JOURNAL.								By balance due from the Society,											
To	Mr. H. M. Smith for reducing, drawing and printing																		
	Maps, &c.	..	..	..	..	682	0	0									
	Mr. W. Ridsdale on account of printing.	..	..	..	..	500	0	0									
"	Messrs. Sanders and Coates for lithographing and printing,	..	..	..	..	127	6	0									
"	Mr. J. Hutchinson for ditto,	..	..	..	..	73	10	0									
"	Messrs. P. S. D'Rozario and Co., for ditto,	..	..	..	..	105	8	0									
"	Macheran for lithographing,	..	..	..	..	79	8	0									
"	Necoo printer for printing,	..	..	..	..	44	6	6									
"	Mr. J. Houdrie for drawings,	..	..	..	..	150	0	0									
"	Copyists for copying certain papers to be inserted in the Journal,	..	..	..	..	33	2	3									
						<hr/>			1,795		8	9							
SECRETARY'S OFFICE.																			
"	Establishment and Contingencies,	..	..	..	..	1,261		3	6								
PICTURES OF SIR E. RYAN AND H. T. PRINSEP, ESQ.																			
To	Messrs. Carr, Tagore and Co., per Messrs. H. T. and W. Prinsep's draft at 60 ds.	..	..	..	..	400		0	0								
BUILDINGS.																			
To	Mr. Murnay for stopping leaks,	..	..	..	..	32		0	0								
						<hr/>		22,484		1	6								
To balance as per account closed on the 31st Dec. 1844,						893		7	8										
						<hr/>													
Co.'s Rs.						23,377		9	2										
						<hr/>													
Calcutta, 31st December, 1845.																			

		Co.'s Rs.		23,377		9		2	
		<hr/>							
		L. E.							

DISBURSEMENTS.

MUSEUM.			
To paid Mr. Blyth's salary as Curator at 250 per month, ..	1,750	0	0
.. Establishment of Taxidermists, Artists, Carpenters, &c. ..	916	0	0
.. Contingencies,	720	15	3
.. J. B. Ellis, for preparing an Elephant Skeleton, ..	25	0	0
	<u>3,411</u>	15	3
LIBRARY.			
To paid salary of Librarian,	580	0	0
.. Duty of Assistant ditto,	297	9	3
.. Establishment for the custody of Oriental Works, ..	476	0	0
.. Establishment and Contingencies,	881	8	2
.. Books purchased,	776	15	6
.. Messrs. Ostell and Lepage for Gould's Australian Birds, in part, ..	450	0	0
.. Messrs. Currie and Co. for shribes, in part,	450	0	0
.. Freight and postage on books received and despatched, ..	110	2	9
	<u>4,025</u>	3	8
MUSEUM ECONOMIC GEOLOGY.			
To paid Mr. Piddington's salary as Joint-Curator at 250, ..	1,750	0	0
.. Establishment,	217	0	0
.. Contingencies,	73	7	0
	<u>2,040</u>	7	0
MUSEUM MINERALOGY AND GEOLOGY.			
To paid Contingencies,	45	8	3
ORIENTAL PUBLICATIONS.			
To paid Mrs. Ballin for lithographing Sir A. Burnes' Drawings,	522	12	0
.. J. Bennett on acct. of Curator's Zoology,	400	0	0
.. Hâfiz Ahmed Kubir, for 500 Copies of the Tawârîkh-i-Nahîr,	965	0	0
	<u>1,887</u>	12	0
MISCELLANEOUS.			
To paid Mr. Piddington's salary as sub-secretary for 2 months, at 200,	400	0	0
.. J. Warner, for a Marble Tablet with Gahl Letters, and republishing the Tablet of Professor Mill,	20	6	0
.. Ditto ditto for Marble slabs, in part,	65	0	0
.. J. Chance, for repairing and keeping the Clock in order, ..	25	0	0
.. Lachman Singh for Drawings,	40	0	0
.. Mr. Garner for fixing Models of Bridges,	20	0	0
.. Bank of Bengal on account discount on Bills for Government allowances,	45	11	4
	<u>616</u>	1	4
JOURNAL.			
To paid copying portions of Hajj-ul Azam in Persian,	4	0	0
.. Messrs. Sanders and Cones for printing,	66	0	0
.. Mr. H. M. Smith for drawings,	115	0	0
.. Mr. J. Hemrie for lithographing,	84	8	0
.. Rev. J. Thomas for printing proceedings,	111	12	0
	<u>381</u>	4	0
SECRETARY'S OFFICE ESTABLISHMENT.			
To paid Establishment and Contingencies,	669	15	0
.. Messrs. D'Rozario and Co. for blank receipts,	15	0	0
	<u>684</u>	15	0
Carried over,	13,123	2	6

RECEIPTS.

MUSEUM.			
By allowance authorized by the Hon'ble the Court of Directors for the Services of a Curator from Dec. 1845 to June last, at 250 per month,	1,750	0	0
By ditto ditto for preparation of specimens for ditto at 50 per month,	350	0	0
	<u>2,100</u>	0	0
LIBRARY.			
By allowance for Establishment for the custody of Oriental Works, transferred from the College of Fort William, from Dec. 1845 to June last, at 78 per month,	546	0	0
By sale proceeds of Books,	673	0	9
	<u>1,219</u>	0	9
MUSEUM ECONOMIC GEOLOGY.			
By allowance from Government for the services of a Joint-Curator from Dec. 1845 to June last, at 250 per month, ..	1,750	0	0
By ditto for Establishment and Contingencies from ditto to ditto at 64 per month,	448	0	0
	<u>2,198</u>	0	0
PUBLICATION OF ORIENTAL WORKS.			
By Grant from Government for the publication of Oriental Works, &c. from Dec. 1845 to June last, at 500 per month,	3,500	0	0
CONTRIBUTIONS AND ADMISSION FEES.			
By receipts from Members,	4,841	0	0
MISCELLANEOUS.			
By Cash received from Government Agents on acct. of Interest on Government Securities in their custody up to 30th April last,	586	13	1
	<u>4,414</u>	11	1

Abstract Statement of Accounts of the Asiatic Society from January to 31st July, 1846.

	Brought over,	13,123	2	6
BUILDINGS.				
To paid Mr. S. Mornay for repairs to the stuns of the Society's premises,	87	0	0	
	13,210	2	6	
To Balance due from the Society as per account closed on the 31st Dec. 1845,	134	12	9	
	13,344	15	3	
To balance in favor of the Society,	1,099	14	10	
	Co.'s Rs.	14,444	14	1

The 31st July, 1846.

To paid Mr. Puddington's salary, Establishment and Contingencies for Museum Economic Geology for July last,	288	4	0	
" Mr. Blyth's salary, Establishment and Contingencies for July last,	479	0	0	
" Secy.'s Office Establishment and Contingencies for ditto,	99	12	0	
" Baboo Rajkrishna Mitter's salary, Establishment and Contingencies for Library for ditto,	278	15	0	
" Miscellaneous charges during July last,	64	8	0	
	1,210	7	0	
" Mr. Puddington's salary, Establishment and Contingencies for Museum Economic Geology and Mineralogy for August,	293	3	3	
" Mr. Blyth's salary, Establishment and Contingencies for Museum for August last,	490	10	6	
" Secy.'s Office Establishment and Contingencies for ditto,	91	2	0	
" Baboo Rajkrishna Mitter's salary, Establishment and Contingencies for Library for ditto,	263	10	0	
" Miscellaneous charges, including Mrs. Ballin, H. M. Smith and J. Weaver's Bills, &c.	512	10	0	
	1,651	3	9	
" Mr. Puddington's salary, Establishment, and Contingencies for Museum Economic Geology, &c. for Sept. last,	391	6	6	
" Mr. Blyth's ditto ditto ditto for Museum for ditto,	494	4	6	
" Secy.'s Office Establishment and Contingencies for ditto,	96	0	0	
" Baboo Rajkrishna Mitter's ditto ditto ditto for ditto, including purchase of Books,	688	14	3	
" Miscellaneous charges, including Mr. H. T. Prunsep's Picture and Cantor's Zoology,	849	11	8	
	2,490	1	11	
	Co.'s Rs.	5,351	15	9
To Balance in favor of the Society,	1,004	15	2	
	Co.'s Rs.	6,356	14	11

The 31st October, 1846.

Brought over, 14,444 14 1

Co.'s Rs. 14,444 14 1

R. R.

By balance per account closed on the 31st July last,	1,099	14	10	
By Government allowance for July last,	1,192	0	0	
By contributions received from Members,	208	0	0	
	1,400	0	0	
By Government allowance for August last,	1,192	0	0	
By Contributions received from Members, &c.	99	0	0	
	1,291	0	0	
By Government allowance for Sept. last (less College Establishment,)	1,114	0	0	
By Contributions and admission fees received from Members,	1,392	0	0	
By Sale proceeds of Oriental Works,	60	0	0	
	2,566	0	0	
	Co.'s Rs.	6,356	14	10

Co.'s Rs. 6,356 14 11

R. E.

Abstract Annual Account of the Asiatic Society from 1842 to 1846.

DISBURSEMENTS.

MUSEUM.			
To Paid Curator's Salary, Establishment and sundry expenses during the year 1842, as per Abstract Statement,	5,920	15	9
„ Ditto ditto during the year 1843 ditto,	7,057	8	6
„ Ditto ditto 1844 ditto,	6,021	5	9
„ Ditto ditto 1845 ditto,	6,072	13	3
„ Ditto ditto 1846 ditto,	6,803	9	6
	31,879	4	9
LIBRARY.			
To paid Librarian and Assistant Librarian's Salary, Establishment and sundry expenses, during the year 1842, as per Abstract Statement,	3,833	10	3
„ Ditto ditto during the year 1843 ditto,	5,048	1	7
„ Ditto ditto 1844 ditto,	4,225	1	2
„ Ditto ditto 1845 ditto,	4,916	10	0
„ Ditto ditto 1846 ditto,	5,912	11	6
	23,966	5	6
MISCELLANEOUS.			
To paid sundry expenses during the year 1842, as per Abstract Statement,	191	0	0
„ Ditto ditto 1843 ditto,	1,813	5	5
„ Ditto ditto 1844 ditto,	3,625	2	0
„ Ditto ditto 1845 ditto,	2,990	11	3
„ Ditto ditto 1846 ditto,	1,050	13	7
	9,671	3	3
MUSEUM ECONOMIC GEOLOGY.			
To paid Joint-Curator's Salary, Establishment and sundry expenses during the year 1842, as per Abstract Statement,	3,049	10	0
„ Ditto ditto 1843 ditto,	3,995	13	1
„ Ditto ditto 1844 ditto,	4,079	2	1
„ Ditto ditto 1845 ditto,	3,619	2	3
„ Ditto ditto 1846 ditto,	3,628	12	10
	18,372	8	3
MUSEUM MINERALOGY AND GEOLOGY.			
To paid sundry expenses during the year 1842, as per Abstract Statement,	303	2	3
„ Ditto ditto 1843 ditto,	250	13	0
„ Ditto ditto 1844 ditto,	210	0	9
„ Ditto ditto 1845 ditto,	36	3	6
„ Ditto ditto 1846 ditto,	67	11	0
	868	1	6
SECRETARY'S OFFICE ESTABLISHMENT.			
To paid Establishment and Contingencies during the year 1842, as per Abstract Statement,	1,121	9	6
„ Ditto ditto 1843 ditto,	1,415	1	9
„ Ditto ditto 1844 ditto,	1,298	10	9
„ Ditto ditto 1845 ditto,	1,261	3	6
„ Ditto ditto 1846 ditto,	1,181	10	3
	6,644	3	9
JOURNAL.			
To paid sundry expenses during the year 1842, as per Abstract Statement,	2,624	0	0
„ Ditto ditto 1843 ditto,	2,909	5	5
„ Ditto ditto 1844 ditto,	1,465	14	8
„ Ditto ditto 1845 ditto,	1,795	8	9
„ Ditto ditto 1846 ditto,	6,603	11	0
	15,396	7	10
Carried over,	106,771	2	10

RECEIPTS AND ASSETS.

MUSEUM.			
By allowances authorized by the Honorable the Court of Directors for the services of a Curator at 250 Rs. per month for the year 1842 as per Abstract Statement,	3,000	0	0
Ditto for the preparation of specimens ditto at 50 ditto,	600	0	0
	3,600	0	0
Ditto ditto for the year 1843 ditto,	3,600	0	0
Ditto ditto ditto 1844 ditto,	3,600	0	0
Ditto ditto ditto 1845 ditto,	3,600	0	0
Ditto ditto ditto 1846 ditto,	3,600	0	0
	18,000	0	0
By advance to J. F. Gomes by Captain Phayre in 1845,	20	0	0
	18,020	0	0
LIBRARY.			
By allowance on account of Establishment for the custody of Oriental Books transferred from the College of Fort William at 78 per month for the year 1842 as per Abstract Statement,	936	0	0
Ditto ditto ditto 1843,	936	0	0
Ditto ditto ditto 1844,	936	0	0
Ditto ditto ditto 1845,	936	0	0
Ditto ditto from Dec. 1845 to Aug. 1846,	762	0	0
	4,416	0	0
By sale proceeds of books for the year 1842 as per Abstract Statement,	829	8	0
Ditto ditto ditto for 1843 ditto,	696	8	0
Ditto ditto ditto for 1844 ditto,	1,002	11	3
Ditto ditto ditto for 1845 ditto,	1,069	14	0
Ditto ditto ditto for 1846 ditto,	801	7	3
	4,410	0	6
By refund on account of attendance of Assistant Librarian as per Abstract account for the year 1842,	20	0	0
	8,866	0	6
MISCELLANEOUS.			
By subscription from Members for a portrait of Sir E. Ryan as per Abstract account for the year 1842,	908	0	0
By Cash account 6th Dividend from Assignee to the Estate of Mackintosh and Co.,	127	9	9
By refund of Import duty on Professor Mill's Bust for 1843 as per Abstract Statement,	76	10	3
By subscription from Members for an ink-stand presented to the Secretary (Mr. H. Torrens) as per Abstract Statement for the year 1844,	932	0	0
By Interest received from Government Agents interest on Government Securities in their custody as per Abstract Statement for the year 1842,	300	0	0
Ditto ditto 1844,	1,037	5	7
Ditto ditto 1845,	704	11	5
Ditto ditto 1846,	693	8	0
	2,735	12	0
COMPANY'S PAPER.			
By sale proceeds of a 5 per Cent. Paper No. 4852 of 3209 dated 14th July 1827 for Rs. 5000 as per Abstract Statement for 1842,	5,387	9	0
Ditto a 5 per Cent. ditto No. 1576 of 1829 & 30 for Sica Rs. 1,500 per ditto 1846,	1,605	10	6
	6,992	19	6
Carried over,	26,886	0	6

Abstract Annual Account of the Asiatic Society from 1842 to 1846.

		Brought over, 106,771 2 10	
ORIENTAL PUBLICATIONS, including the "Burmes and Cantor Drawings."			
To paid sundry expenses during the year 1842, as per Abstract Statement,			
" Ditto ditto 1843 ditto,	7,295	10	6
" Ditto ditto 1844 ditto,	1,318	0	9
" Ditto ditto 1845 ditto,	918	0	0
" Ditto ditto 1846 ditto,	1,359	10	0
" Ditto ditto 1846 ditto,	2,435	12	0
	13,357	1	3

BUILDINGS.			
To paid in part for additions and sundry repairs done to the Society's premises during the year 1842, as per Abstract Statement,			
" Ditto in full 1843 ditto ditto,	3,000	0	0
" Ditto 1844 ditto ditto,	4,571	7	0
" Ditto 1845 ditto ditto,	41	0	0
" Ditto 1846 ditto ditto,	32	0	0
" Ditto 1846 ditto ditto,	112	0	0
	7,759	7	0

ASIATIC SOCIETY OF PARIS.			
To paid for copying the Vedas and sundry expenses during the year 1843, as per Abstract Statement,			
" Ditto 1844 ditto ditto,	383	7	9
" Ditto 1844 ditto ditto,	50	0	0
	433	7	9

PICTURES OF SIR E. RYAN AND H. T. PRINSEP, Esq.			
To paid Messrs. Carr, Tagore and Co., per draft of Sir E. Ryan and Messrs. H. T. and W. Prinsep, as per Abstract Statement for the year 1844,			
" Ditto ditto 1845 ditto,	1,142	13	8
" Ditto ditto 1845 ditto,	400	0	0
" Ditto ditto 1846 ditto,	614	11	8
	2,157	9	4

PICTURE OF HON'BLE W. W. BIRD, Esq.			
To paid P. R. Neilson, Agent, Agrawal W. S. Bank, per W. H. Allan and Co.'s draft at 30 ds. st. for,			
	1,368	8	9
	1,368	8	9
	1,31,847	4	11
Balance in favor of the Asiatic Society,	1,997	9	7

(Arranged from Mr. Bolst's abstracts.)

Calcutta, Asiatic Society, } the 31st December, 1846. }	(Signed.)	J. M. MULLER.	
N. B. Balance as per Cash account on the 31st Dec. 1846,	2,430	0	6
Balance as above ditto,	1,997	9	7
	Difference, Co.'s Rs.	232	6 11

This difference arises from the difference between Mr. Bolst's account, closed 31st July, 1846, and Balance of cash on that day, which will be examined and corrected hereafter.

		Brought over, 26,886 0 6	
Ditto ditto No. 1121 of 1829 & 30 ditto 2,500 as per Abstract Statement for 1846,	2,623	5	0
Ditto ditto No. 3743 of 120 of 1841 & 42 for Co.'s Rs. 5,000 per ditto,	5,116	10	8
	<hr/>	11,803	3 2

MUSEUM ECONOMIC GEOLOGY.			
By allowance from Government for the services of a Joint-Curator from 26th Feb. at 250 per month as per Abstract Statement for 1842,			
" By allowance from Government for the services of a Joint-Curator for 12 months at 250 Rs. per mensem as per Abstract Statement for the year 1843,	2,276	12	6
" Ditto ditto for Establishment and Contingencies ditto as per Abstract Statement for the year 1843,	3,000	0	0
	1,421	7	3
	4,121	7	3
By allowances for Establishment and Contingencies as per Abstract Statement for the year 1844,			
" Ditto ditto ditto 1845 ditto,	3,768	0	0
" Ditto ditto ditto 1846 ditto,	3,768	0	0
	18,005	3	9

PUBLICATION OF ORIENTAL WORKS.			
By grant from Government at 500 Rs. per month as per Abstract Statement for 1842,			
" Ditto ditto ditto 1843,	6,000	0	0
" Ditto ditto ditto 1844,	6,000	0	0
" Ditto ditto ditto 1845,	6,000	0	0
" Ditto ditto ditto 1846,	6,000	0	0
	30,000	0	0

CONTRIBUTIONS AND FEES.			
By receipts from Members during the year 1842 as per Abstract Statement,			
" Ditto ditto ditto 1843,	7,038	0	0
" Ditto ditto ditto 1844,	7,604	0	0
" Ditto ditto ditto 1845,	6,250	0	0
" Ditto ditto ditto 1846,	7,144	0	0
" Ditto ditto ditto 1846,	6,965	0	0
	35,701	0	0

PICTURE OF H. T. PRINSEP, Esq.			
By subscription from Members for a portrait as per Abstract Statement for 1843,			
	1,195	0	0
	1,195	0	0

ASIATIC SOCIETY OF PARIS.			
By Cash received for Copying the Vedas as per Abstract Statement for 1843,			
	625	0	0
	625	0	0

		1,31,995	7 5
By balance as per account rendered 31st Dec. 1841,		1,849	7 1
		Co.'s Rs.	1,33,844 14 6

R. E.

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